BIKE SENSE ON-BIKE

Introduction

Bike Louisville's Bike Sense program is designed as a series of five 30-40 minute lessons for Grades 3-5 Physical Education (P.E) Classes. In addition to the 5 lessons the Bike Sense curriculum also includes a youth cycling enforcement component. Bike Sense is recommended to be taught to Grades 3-5.

These lessons presume that students already know how to balance a two-wheeled bicycle. Most students will know how to do this by Grade 1 or 2, but for those who have not been taught how to bicycle, this curriculum provides techniques which will teach non-bicycle rides to ride in no time!

Background for Bicycle Safety

Teaching safe bicycling skills is one important way to support Louisville students in bicycling to school. In Louisville's rural communities, bicycling is one significant way that children can "extend their range" beyond walking – whether it is to school, to a friend's house, or for other social or recreational activities.

The Bike Sense On-Bike curriculum is designed to teach students the skills they need to avoid typical childhood crash types. There is sometimes a misperception that most bicycle crashes involve motor vehicles. However, for bicyclists of all ages, the most frequent crash type is a simple fall – in which the bicyclist loses control of the bicycle. The bicyclist may encounter an obstacle in the roadway, have problems braking, lose control due to riding too fast, or simply lose his or her balance. Younger children are more likely to fall, as they have less experience judging road hazards, partially developed motor skills, and a less developed sense of balance. Falls can cause scraped knees, but they can also cause serious injury or death, particularly for bicyclists not wearing a helmet.

Since up to 90% of fatal bicycle crashes are the result of head trauma, Bike Sense stresses the importance of always wearing a properly fitted helmet. Bike Sense On-Bike reinforces helmet wear, and both students and instructor will wear a helmet throughout the lesson series.

Bike Sense On-Bike also teaches bicycle handling skills to avoid falls. Some crashes do involve motor vehicles; Bike Sense On-Bike teaches bicycle traffic safety skills, designed to address typical crash causes.

Many people have the mistaken impression that bicyclists are most at risk of being hit by a car from behind. Yet, nearly 90% of crashes occur in front of the bicyclist, due to turning movements, mostly at intersections. Motorists may not see a bicyclist who has the right of way, or a bicyclist may ride through a light or stop sign.

Children who are hit by a motor vehicle from behind are likely to have caused the crash by swerving into the car's path without looking. This underscores the importance of practicing riding in a straight line and looking over the shoulder before turning left. Tables 1, 2 and 3 provide additional detail about typical crash types.

Table 1: Typical Car-Bike Crashes by Age Group

Median Age	Major Cause of car-bike crashes
Under 12	Entering the roadway; swerving about
12-14	Right-of-way errors; wrong-way riding
Over 14	Signal changes; motorist drive-out; motorist turns; motorist overtaking

Crash information from Effective Cycling, John Forrester. MIT Press. 1993. p 268.

Table 2: Frequent Child Errors/Ages Most Likely for Them to Occur

Error	Occurrence	Bike Sense
Driveway ride-out: not stopping and/or not looking for traffic at end of driveway or edge or curb before entering street	Up to 30% child crashes. Most frequently, ages 5-9	Marking end of driveway and setting rules help children avoid this error. Parental Rules: Small children do not cross the mark at end of drive, bigger kids walk bike to end of drive, stop first before looking and then, when no traffic is passing and with pedal in "power position," leave driveway and enter travel area of street or road.
Stop sign ride-out: not stopping, or stopping and not really looking before riding into intersection	Up to 20% of child crashes. Most frequently, ages 10-14.	Children this age want to know the rules of the road and why they are important. They many not yet understand who is supposed to yield, but they do understand "stop" means "stop". The intersection drills in Lesson #3 are oriented toward this crash-type.
Sudden swerve in front of motor vehicle: child wants to go to left side of street, or turn left but fails to look behind for other vehicles.	Up to 30% of child crashes. Most frequently, ages 10-14	This skill is taught in Lesson #2, in the section called "Look back, lifesaver." The action of looking back before turning left can literally be a lifesaver.
Wrong way riding	Nearly 1/3 of all crashes, (child and adult involve a bicyclist going against traffic).	Emphasize the importance of riding with traffic throughout the lessons.

Crash data based on statewide data from Wisconsin, summarized by the Wisconsin Department of Transportation.

Table 3: Car-Bike Crashes in Urban and Rural Settings, by Age Group

	Urban	Rural
Child	1. Bicyclist Running Stop Sign 2. Bicyclist exiting a residential driveway 3. Bicyclist riding on sidewalk truing to exit driveway	1. Bicyclist exiting residential driveway 2. Bicyclist swerving on the road 3. Bicyclist swerving left 4. Bicyclist entering road from a sidewalk/shoulder 5. Bicyclist running stop sign
Teen	1. Wrong way bicyclist hit by motorist restarting from stop sign 2. Bicyclist turning left from curb lane 3. Bicyclist exiting commercial driveway 4. Wrong-way bicyclist running stop sign 5. Wrong-way bicyclist head on	1. Bicyclist turns left from curb lane 2. Wrong-way bicyclist head on 3. Wrong-way bicyclist hit by motorist restarting from stop sign 4. Bicyclist turning left from curb lane, hitting car from opposite direction 5. Right-of-way error at uncontrolled intersection
Adult	1. Motorist turning left 2. Signal light change 3. Motorist turning right 4. Motorist restarting from stop sign 5. Motorist exiting commercial driveway	1. Motorist overtaking unseen bicyclist (mostly in darkness) 2. Motorist overtaking too closely 3. Motorist turning left 4. Motorist restarting from stop sign 5. Bicyclist swerving around obstruction

History

What worked in Louisville and how can this model work in your community

Louisville's Bike Sense Program began in the fall of 2010 with the inspiration of a young 5th grader who had a passion for bikes and bike safety. A course was set up at Indian Trail Elementary School that trained 60 students in grades 3-5 proper bike safety techniques. By spring of 2011 two other elementary schools, Rangeland and Wellington Elementary Schools added Bike Sense curriculum to their after school programs, where 60 additional students were trained on bike safety. In the summer of 2011, Bike Sense professional development curriculum was instituted in Jefferson County Public Schools (JCPS) that gave teachers the opportunity to become trained on Bike Safety measures that would be taught in classrooms. Seventeen JCPS teachers participated in the training which allowed for 1,500 students to become trained on bicycle safety measures in the fall of 2011.

Curriculum Overview

The Bike Sense Program teaches Bicycle Safety to children in grades 3-5 who will be navigating the roads in metropolitan areas. In an attempt to keep the content manageable for one annual lesson on bike safety, many choices had to be made about the key concepts and skills to feature in the curriculum.

The lessons are designed to:

- Keep Children actively engaged
- Integrate children's experience and skills into the activities
- Practice decision-making skills for healthy and safe choices

Bicycle Safety Educators

The Bike Sense curriculum encourages classroom or physical education teachers, school administrators, volunteers from local bike clubs, police officers or anyone who wants to encourage bicycling in their local area. Prior to implementing the program it is important to be Bike Sense trained. It is important for the teacher to be a good role model, someone who seeks to share a love of physical activity with the next generation.

Bike Sense Certification

Before implementing the Bike Sense On-Bike! Curriculum we stronger suggest you become Bike Sense Certified. A one day, six hour, free Bike Sense certification will teach the knowledge and skills necessary by Bike Louisville, the National Highway and Traffic Safety Administration (NHTSA) and the US Department of Education (USDOE) to train and certify teachers to teach 3rd, 4th and 5th grade elementary school students in the concepts and skills related to bicycle safety.

The Bike Sense certification will certify you to teach your students the following criteria:

1. Ride bikes for transportation, especially to and from school
2. Learn safe riding skills and use proper equipment
3. Ride for fitness and experience new cycling skills, including racing skills
4. Learn to maintain their bike and make minor repairs
5. Learn basic safety and first aid techniques

Homework

Students should be assigned the following homework to make the first lesson of Bike Sense run smoothly:

- Wear clothes appropriate for bicycling to school for the Bike Sense modules: Light, bright and tight.
- If you are bringing your bicycle to school, check that it passes the ABC Bike Quick Check this week, so you have time to get it fixed if it does not pass the test. Ask a parent or another adult to help you fix it, or take it to the local bike shop. If it still does not pass the test, don't ride it to school.

Preparing to Teach

Bike Sense On-Bike includes two aspects that are atypical of P.E. classes: 1) the curriculum is designed to work, in part, by asking students to bring their own equipment from home: and 2) the curriculum includes a field-trip for which permission slips may be needed.

Table 4: Below is a recommended timeline for implementation of Bike Sense on – Bikes

Timeline	At School	From Parents / At Home
Prior to scheduling unit	If needed, obtain permission to teach the unit. Talk with school administration about space and facilities needs, e.g., use parking lot or school driveway, arrange for bicycle parking.*	
Six weeks before	Ask students for a show of hands who has a helmet? How many can bring bicycles? If you are planning a bicycle field trip, ask your Bicycle and Pedestrian Coordinator for maps (see lesson 5)	Send home parent/ guardian letter #1, with Bicycle Equipment Survey and helmet order form (See Supporting Materials)***
Four weeks before	Helmet orders due; place helmet order with local bike shop or ask your Bicycle and Pedestrian Coordinator for helmets	
Two weeks before	Conduct Bike Sense classroom instructions.	Assign homework as above
One week before	Recruit staff member or local bicyclists from the community for bicycle field trip (Lesson #6)	
During Bike Sense On-Bikes		Send home second letter for Bike Sense On-Bike, and permission slip for field trip. Recruit parent volunteers for bicycle field trip.

* If you wish to use a school parking lot or driveway, you will need to arrange this with your administration in advance of the classes. You may use a parking lot with parked cars in it, if it has sufficient space, but no cars should be driven during your classes. To save time getting and storing bicycles, you will find it helpful to have your students park their bicycles near your teaching area. However, don't move the school bike rack to a less convenient location for bicycling to school.

** Asking student's increases buy-in for the idea of bringing and sharing their bicycles for the lesson. Don't count entirely on these numbers: students who would need to be driven to school with a bicycle may not consider whether it is practical or realistic to bring the bicycle to school.

Where to Order Helmets

Each student should also be asked to bring his or her own helmet to school. In order to make sure that most or all students have helmets, you may wish to your local Bicycle and Pedestrian for additional helmets. If you are planning to share helmets it's important for the children to use hairnets for personal hygiene.

Instructor Equipment

Instructors are encouraged to bring their own properly working bicycles and helmets. Instructor bicycles do not need to be of a particular style but should be in good working condition. Instructor helmets should meet current safety standards (CPSC sticker inside). If your helmet is not recent in style, you may wish to use a student's helmet as an example of more current styling. As modern bicycle helmets are lighter and fit better, you may wish to upgrade your helmet.

Although you will be teaching bicycling, it is recommended to wear regular clothes, rather than bicycling shorts and jersey. Most students do not have specialized bicycling clothing. Do wear clothes that are "light, bright and tight" – comfortable, light/bright-colored, and tucked close to the body for safety.

Summary:

- Instructor bicycle in good condition
- Instructor helmet
- Comfortable clothing

Student's Equipment

As noted above, this curriculum asks students to bring their own bicycles from home to be used and shared in instruction. You will need at least one bicycle for every three students. By having students from all classes share bicycles, you may be able to outfit each PE class with bicycles for every student. IF students will share bicycles with other classes, you may wish to have a cable lock to secure all bicycles in this category between classes.

Each student should also be asked to bring his or her own helmet to school. In the first lesson, you and the students will conduct ABC Bike Quick Checks on all of the bicycles to be used for basic safety. If a bicycle does not pass the bicycle safety check, it should not be used for instruction.

If students need to share bicycle helmets, then protective headgear (hair nets or surgeon's caps) should be used to prevent potential spread for lice. You may be able to get these donated from local hospitals or school cafeterias.

Summary:

- Student Bicycles –at minimum, one for every 3 students
- Student Helmets- recommended, one per student
- Surgeon caps or hair nets- if helmets must be shared

Table 5: Bike Sense On-Bike Props and Equipment

	Lesson 1: Ready to Ride	**Lesson 2:** Stop & Go Look Back	**Lesson 3:** Driving at Intersections	**Lesson 4:** Bicycle Handling	**Lesson 5:** Prep for Fieldtrip	**Lesson 6:** Bicycle Fieldtrip
All Lessons- Bicycles & Helmets for Instructors & Students						
ACTIVITY SHEETS	Fitting a Bicycle Helmet ABC Bike Quick Check	Car Placards (optional)	Stop signs Car placards Traffic light	Drain grate		Bicycle Field Trip Leader Information
OPTIONAL based on site	Traffic cones Chalk or tape Cable lock	Traffic cones Chalk or tape Cable lock	Traffic cones Chalk or tape Cable lock	Traffic cones Chalk or tape Cable lock	Traffic cones Chalk or tape Cable lock	Cable lock
EQUIPMENT	Bicycle floor pump Bicycle repair tools (see Reference section- Notes on Student Bike Maintenance)			5 Kitchen sponges Water (to wet sponges) Parked car (unlocked)		Portable bicycle pump Bicycle patch kit First aid kit Cell phone or radios to communicate with school
OTHER	Pre test Assessment Rubric	Assessment Rubric	Assessment Rubric	Assessment Rubric	Map of town Post test	Route maps Assistant ride leaders (parents or other adults) Rider leader emergency contract info & plan.

Activity Sheets are found in the appendices.

Setting and Environment

Bike Sense lessons are designed to be conducted on your school grounds, preferably outside. You may need to set up chalk lines or traffic cones in advance of the lessons. However, if your school site has driveways or parking lots that you can incorporate into your lesson, you may be able to minimize this set up. Throughout your lesson planning, you are encouraged to think creatively about how to use the existing environment.

Some of the lessons can be taught indoors, in a gymnasium or large multi-purpose room, if this is critical to maintain you teaching schedule. You may need to shift some sections of lesson #2 and lesson #4 from an indoor to an outdoor setting. Any time you are practicing the "look back" skill, a riding area of 100-200' in length is needed- preferably outdoors. In preparation for inclement weather, check the forecast for the coming week and make adjustments to the training schedule that will accommodate the forecast for the coming week.

LESSON 1: GETTING READY TO RIDE

OVERVIEW

On the first day of class it is important to determine the experience level of the class. If a class has a number of children in it that aren't familiar with bikes, an instructor may want to seek additional help with the course curriculum. In a class that has a number of children who are not familiar with riding bikes or bicycle safety it will be hard for an instructor to manage teaching and supervising the curriculum while keeping the class in order.

PRE AND POST TEST

Pre and Post Test evaluations will help instructors determine the bike safety education level of each class and help determine the effectiveness of the bike safe training program. It is recommended that each instructor give pre and post test surveys to students. See appendix 11 for a sample survey that can be given to students as an evaluative tool before and after the bike sense training is conducted.

ICEBREAKERS

It is important that the children understand that bikes safety is to be taken seriously. It is also important to express to the students how much fun riding bikes can be. At the beginning of the program, use icebreakers to help students become comfortable with the idea of riding a bike. Ask the students questions like:

- Who has ridden a bike before?
- Who has a bike at home?
- Who has ever fallen off a bike?
- Why is bike safety important?

Additionally, telling personal stories about your experiences with bikes can help students relate to the process of learning how to ride a bike and make them feel more comfortable.

Time: 40 minutes

Key Concepts and Skills

Helmet Safety
Know how to wear a helmet
… eyes, ears, mouth
…adjust helmets for use in lesson

Dress for Safety

Dress Light bright and tight

Equipment Needed
Bicycles and Helmets
Hairnets
Reflective Clothing
Bicycle white and red lights

ABC Bike Quick Check
Check air, brakes, chain and quick releases
Check headset/steering

Bicycle Handling Skills
Try and assess who can ride
Ride in a straight line
Sweatshirt Method

Bicycle Fit
Know whether a bicycle fits
Adjust seat height

DRESS FOR SAFETY

Light-Bright-Tight
Discuss with the children that they want their clothing to have three main characteristics when riding the bike: **light, bright and tight**. Remind them that day or evening it is important wear white or light clothing so they can be seen by cars.

Demonstrate:

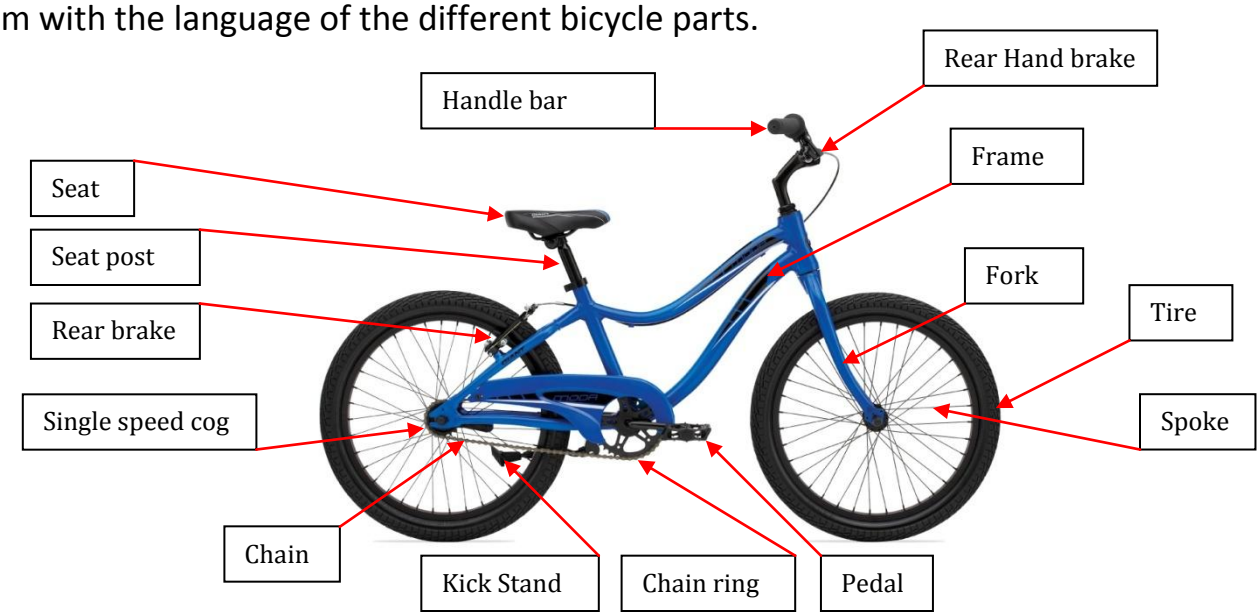
> Show the importance of tight clothing by tucking in lose shoelaces or cuffing pants and explaining the hazard of getting shoelaces or lose fitting pants caught in the bicycle chain. Also discuss the importance of being seen at night. Ask the students if they think cars can see them easily in the evenings. Discuss the danger of riding at dusk, when the sun can often obstruct from drivers ability to see them. Ask them what they can do to remain visible while on their bikes. Discuss lights, reflectors and light colored clothing as safety measures while riding.

Activity:

Ask the students to look at themselves and decide if what they are wearing qualifies as light or bright. In bicycle teams of 2-3, ask the students to make sure their clothes are “tight” – tuck in shoelaces and pant cuffs and any loose strings, straps, or clothing.

PARTS OF THE BIKE

Go through the individual parts of the bike, chain, wheel, handlebars etc. and familiarize them with the language of the different bicycle parts.



ABC QUICK CHECK

Explain:

Explain to the children that they should check their bikes each time they ride and discuss the ABC’s of the bike, Air, Brakes and Chain. Encourage them to memorize this acronym. Demonstrate:

Demonstrate:

Air: Squeeze the tires to check for low air pressure and ask if the tire looks like it feels firm.

Brakes: Squeeze each brake lever and ask:

- Does the wheel stop quickly?
- Does the brake lever hit the handlebar?
- Are the brake pads hitting the tires instead of the wheel rim?

Crank/Chain: Is the chain on track?

- Is there anything caught in the chain?
- Is the chain clean and lubed?
- Is either of the crank arms loose?

Quick: Check the quick releases on the front and rear hubs and on the seat post.

- Are they in the closed position?
- Spin: Spin the wheels
- Do they spin smoothly?
- Do they have any broken spokes?

Once you've demonstrated the importance of the ABC Quick Check demonstrate the importance of having a properly aligned bike. Standing over the bike, hold the handlebars even and check to make sure that the front wheels line up with the frame of the bicycle. Also check to make sure that you can't move the front of the wheel side to side when you hold the handlebars steady.

HELMET FIT

Discuss the importance of wearing a helmet every time they ride their bikes, regardless of how far they ride. Discuss the proper criteria for wearing a helmet which can be found in appendix 3.

Explain:

Explain to the children that a helmet needs to be fitted for each person's Head. If it is hanging to the side or sliding up, it won't help protect them if they get into an accident.

Demonstrate: Check your own helmet by doing an Eyes, Ears and Mouth check.

- Eyes: You should see the very edge of your helmet when you look up
- Ears: Straps should meet right under your ear lobes to form a V
- Mouth: Strap should be loose enough so you can talk, but tight enough so you feel the helmet pull down when you open your mouth wide.

Activity:

Have the children stand in two lines facing each other. Review the proper safety measurements for fitting a helmet properly and have them check the person in front of them to make sure that their helmet is fitting them correctly. Have them check to make sure the helmet is fitted correctly by looking directly down at their shoes.

Lessons Learned:

- Children may need a larger helmet because of barrettes and pony tails
- Many helmets are color coded by size, have children remember the color of their helmet so they know which size helmet to use each day.
- Don't forget hairnets

RIDE IN A STRAIGHT LINE

Explain:

In the next part of the lesson, you will practice riding the bicycle in a straight line. You will usually want to ride in a straight line on the road, unless you are turning onto another road or into a driveway.

Observe:

How straight do the students ride? Try and gain a sense for who can ride proficiently and who may need some extra coaching. If there is not time to give individual attention, make a note to try and assist students who are needing extra assistance first thing during lesson 2.

SWEATSHIRT METHOD

It is important that instructors keep respectful physical boundaries between themselves and the children they are instructing. The sweatshirt method is a practice that instructors can use to assist children who are having a hard time learning how to ride a bike safely. Instructors can use a sweatshirt and wrap it around the front of a child, while holding onto the arms of the sweatshirt as a way to balance the child while they are learning how to ride in a straight line. Instructors will want to do this one on one, at the end of Lesson #1 or before Lesson #2.

Child learning how to ride in a straight line using the sweatshirt method.

LESSON 2: STOP AND GO/LOOK BACK

OVERVIEW

Swerving out into traffic is the leading cause of car-bicycle crashes for children and youth. Bicyclists must learn to look over the left shoulder for traffic when turning left. There are also instances in which a bicyclist will need to look to the right; upper grades should practice looking over both shoulders. For older grades, you may wish to proceed through the starting and braking exercises more rapidly if you feel the class is comfortable with these skills. If you are using bikes with gears, you could then do a quick lesson on down shifting before stopping.

Time: 40 minutes

Key Concepts and Skills

Bicycle Handling Skills	**Traffic Safety Concepts**
Turning	Stop and Go
Hand Signals	Braking
Lane Positioning	Scan and Signal
	Stop and Go with Power Pedal
Equipment Needed	Scan Drill
Bicycles and Helmets	
Hairnets	
Cones	

LESSON SET UP

For this lesson you will need 3 or more lanes, marked with chalk or using lines already marked on your track, parking lot, or field. The lanes should be 4-6' wide and 100-200 ' long. You may use cones to help delineate the ends of the lanes, but a line still needs to be marked between the cones.

INDOORS: The “look back” part of the lesson may be conducted inside only if you have a space at least 100’ long. If you do not have a large enough room and the weather prohibits going outside, you can save the “look back” part of the lesson for Lesson #3 and substitute the first intersection drill from Lesson #3 into this lesson. Starting and stopping drills may be done in a smaller space as well.

STOP AND GO

Tell them that first we will be learning “stop and go”. First we will cover at few tips for starts and stops and then we will practice by riding in a straight line while starting, stopping, pedaling and looking over your shoulders. Discuss that is it is important to ride smoothly so you don’t lose your balance as you are starting because you don’t want to wobble into cars as you start. Having some power will help you get started, especially if you are going uphill.

Demonstrate:

POWER PEDAL: Mount the bicycle and put your rear leg over the back wheel. When you start riding, you want to have one of your pedals in the “power pedal position” so that your thigh muscle (one of the strongest muscles in your body) is ready, like a spring, to push down on the pedal and five you a little burst of energy to move the bike forward as you start.

Push: If your bike has a “free wheel” in the back, you can put your pedal in the power pedal position when you bike is stopped by pedaling backward. If your bicycle has a coaster brake, you will need to walk you bike forward slightly while pushing the pedal forward with your foot, to get into the power pedal position.

Coast to a Stop: Once you are ready to stop place allow the bike to naturally decelerate and place your feet on the ground slowly working the bike to a halt.

Explain:

Tell them next we will practice braking. If you have brakes on both of your handlebars, those are called brakes. If you brake by pedaling backwards that is called a coaster brake. For those who have both

front and rear brakes, it is important to use both together. The front brake provides most of your stopping power.

Demonstrate:

To start, push off with the foot that is on the ground, while pushing on your power pedal. Keep both hands on the handle bars. You want to get started smoothly and quickly (but not fast) since the forward motion of the bicycle helps you with balance. Ride on the right side of the lane, coast to a stop.

Ask:

What are some things that are important about braking?

- It is important not to go over the handlebars! Why would you want to go over the handlebars?
- Discuss just using the front brake: When you are going down a hill it is even more important to use both brakes together because the combination of a downhill momentum and front braking can cause the rider to go over the handlebar.
- It is important to remember to steer while braking
- It can be hard to brake and use your hands to give a turn signal at the same time. If you choose, it is more important to brake safely.

Demonstrate:

Show how to brake correctly by squeezing the brakes together. If you just squeeze the front brake, your bicycle will rotate around the front wheel. That is why you don't want to use the front brake alone. Squeeze your front brake, and show how the back wheel lifts up easily. Reinforce how to brake correctly. Demonstrate riding a very shot distance, and show stopping- braking, putting your foot down, and resetting your pedal to the power pedal position to be ready to start again.

HAND SIGNALS

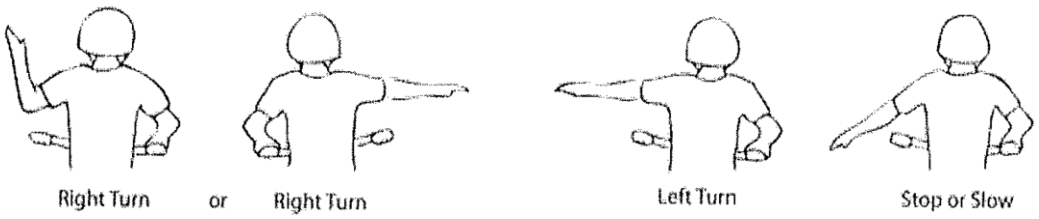
Explain:

Hand Signals Communicate to the drivers of other vehicles which way you would like to go. There are three hand signals to know:

turn left, turn right and stop or slow.

Demonstrate:

Show the signals for left, right and stop



Activity:

Practice Hand Signals with students

Look Back, Lifesaver:

Explain:

This is an exercise to practice riding straight while turning your head to look back over your shoulder for traffic. This is a very important skill to be able to find out if there is a car behind you, especially if you want to turn left, or if you want to move toward the middle of the street to avoid a road hazard, like a rock or a pothole. Looking back over your shoulder is called a “lifesaver” because it can save your life. It is also called “scanning”.

This is a skill that you will someday use when you are driving a car. Next time you are in a car with someone on a multi-lane road, watch the driver as he or she moves into the left-hand lane. The driver should look back over his or her shoulder to check for traffic. It is very important that the driver doesn’t steer left until the way is clear.

When you look back over your shoulder, you need to keep your bicycle pointed forward, and just turn your head. You want to keep the bicycle riding straight ahead. Be careful that you don’t’ also move your arms and handlebars. In addition to turning your neck, you will also twist your upper body, but keep your arms straight ahead.

If you have trouble doing this with both hands on the handlebars, you may drop your left- hand off the handlebars, while continuing to steer straight ahead with the right hand. This is a good skill to practice with a friend or parent. You may find that your parents could use some practice too!

Demonstrate:

Ride away from the students, and demonstrate looking back over your left shoulder while riding straight. Return to the group, and show up-close how your upper body twists as you keep the handlebars straight. Show how it can be easier to avoid turning the handlebars if you drop you left hand off the handlebars.

Activity:

At least two team members will participate in this exercise; team member #3 may walk or jog in a separate area. Team member #1, with the bicycle, will ride in a straight line, along your designated lanes (at least 100' long, but preferably 200' long). Team member #2 will stand at the start of the lane, so that he or she is standing behind the bicyclist.

Team member #1 will ride in a straight line and will periodically be asked to look back over his or her left shoulder when the teacher or group leader yells the word "scan". Team member #2 will hold up one arm, two arms or no arms. Team member #1 will have to identify "one", "two", or "none."

Rotate positions so all students have a chance to ride and a chance to be an observer.

LESSONS LEARNED

This is the first on the bike group activity done in the training and it can be hard to keep the class's attention. Having the kids who are waiting for a bike can run in place or do jumping jacks to keep their attention spans under control.

Some children may be having a hard time learning how to get going on the bike and may feel embarrassed that they don't know how to ride. The instructor can take a sweatshirt and wrap it around the child's waist and run behind the child as an assist for balance and stability on the bike.

LESSON 3: BICYCLE DRIVING AT INTERSECTIONS

OVERVIEW

This lesson focuses on bicycling at intersections, including hand signals, riding at stop signs and traffic light, and lane positioning. Most car-bike crashes occur at intersections, particularly in an urban or small-town environment. Children and youth are more likely to be at fault in these crashes, due to a misunderstanding of the need to stop at traffic signs and signals, or due to a misunderstanding of who has the right-of-way. Even in rural areas, most car-bike crashes involving children or teens occur at intersections-not on the open road.

Time: 30-40 minutes

Key Concepts and Skills

Bicycle Handling Skills	**Equipment**
Intersections	Bicycles and Helmets
Driveways	Hairnets
Right of Way	Tape or Chalk (to mark intersections)
Turn Signals	4 Placards (to mark stop signs)
Lane Positions	

INTERSECTIONS

Explain:

As you begin the lesson explain to the children the importance of intersection safety by telling them that bicycles must obey the same rules that cars do. Tell them that intersections are very dangerous areas to ride a bike so it is important that they be extra careful and learn how to communicate with cars in instances when they may not be sure if they have the right of way. That's why we have hand signals, stop signs and street lights, so we can communicate!

Go over the following terms:

Starting: Demonstrate the power pedal position and check that the students can explain how to properly execute a smooth start.

Stopping: Check that the students can explain the importance of using both hands on the handlebars and demonstrate a smooth stop, including returning the pedal to the power position.

Look-back Lifesaver: Check that the students understand how to ride in a straight line and look over their shoulders and demonstrate how to do this properly.

Hand Signals: Check that the students can explain and demonstrate all three hand signals:

- Left
- Right
- Stop/Slow

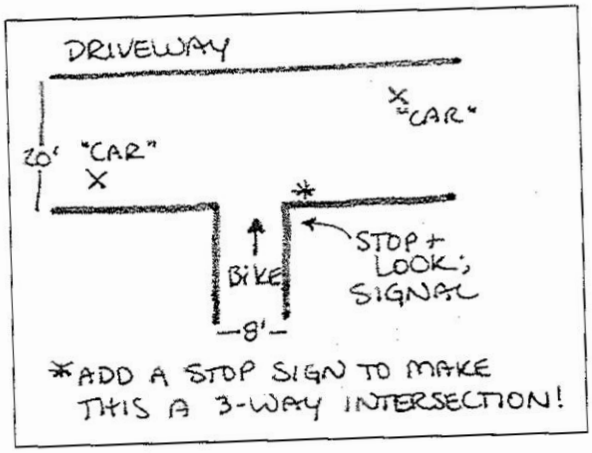
DRIVEWAYS

Explain:

Your driveway is like a small private road, just for your family and visitors to your house. It is best to treat driveways just like miniature roads. At the end of your driveway is an edge, where your private road stops and the public road starts. Ask them, how they know who has the right to go first at an intersection. (There are two things that affect who gets to go first at an intersection: who got to the intersection first, and whether any of the drivers have a stop sign or a traffic light.)

Demonstrate: Use your mock intersection without a stop sign. Pick one leg of the intersection to be the driveway, and ride down the right hand side of the driveway.

Demonstrate stopping at the driveway – as you come to a stop, you will brake, and stop with one foot on the ground and the other on the pedal in the power-position to be ready to start again. Point out the



edge of the driveway, and that there is no stop sign, but that the same traffic rules apply as if there were a stop sign.

STOP SIGNS

Explain:

At an all-way stop, you will need to stop, but the other traffic will need to stop too. It is very important not to get confused between an intersection where everyone has to stop, and an intersection where only you have a stop sign. All-Way stops are first come, first served. Everyone takes turns in the order in which they arrived at the stop sign. If there is a line of cars on one street, the drivers on that street will take turns with the traffic arriving from other directions.

The rules are the same for bicycles. However, when you are riding a bicycle, the driver may not see you even if you have the right to go first. You must pay attention to whether the driver sees you and/or waves you on. If a driver is talking on a cell phone, adjusting the car radio, or talking to a passenger, they may not see you. Even if the driver looks like they are looking right at you, they may not really see you. When it is your turn, you should go but you should go carefully in case the driver does not see you to let you have your turn.

Ask:

How can you use your body language to communicate to a driver?
When you are stopped at a stop sign, putting your foot down is body language to show that you are stopped and waiting your turn. You can look at the other drivers at the intersection- turning your head to look at them. Turning your head to look communicates more than just looking with your eyes. Using a hand signal also communicates to the drivers the direction you are planning to turn.

How can you tell from a driver's body language what they are planning to do?
A driver who waves you on is communicating that he or she sees you, and can let you go. A driver who is talking on the cell phone may not be paying attention- use extra caution.

How can you tell what direction a driver is planning to turn?

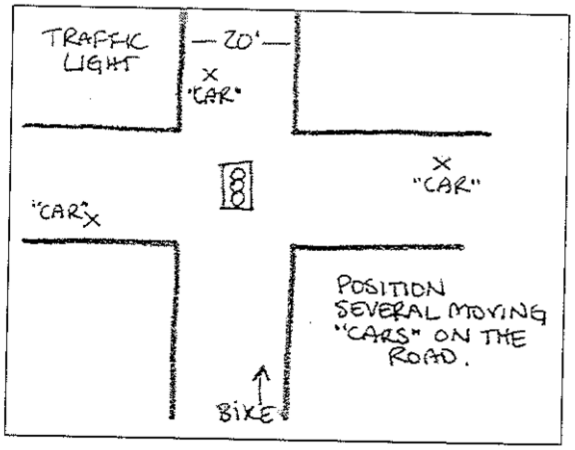
Cars have turn signal lights that flash when the driver activates the light. The light will flash on the side of the car where the car is planning to turn, both front and back. However, not all drivers use their signals, so you cannot count on the turn signal. Sometimes you can tell if a driver is planning to turn by the car's position on the road, o by the direction the front wheels are pointing.

What happens if a pedestrian appears at the intersection at the crosswalk? Bicyclist must stop for pedestrians in crosswalks, just like cars must stop.

STOP LIGHTS

Explain:

A traffic light is usually placed at a fairly busy intersection and gives several drivers in a row from the same direction the right to go, one after the other. A traffic light is different than a stop sign. Instead of taking turns, the opposing traffic (the traffic facing you) has the right to go at the same time. If you are both going straight, you simply pass each other. Any traffic that is turning left must wait for the traffic going straight to go first.



Traffic lights would be easy if all cars were going straight. What makes intersections with traffic lights complicated is turning traffic. When you are coming up to a traffic light on you bicycle, you must be cautious of drivers who are turning. And if you are the one who is turning, you must be cautious of the drivers who are going straight.

Generally drivers or bicyclists who are turning left must wait for drivers who are going straight or turning right. Left turns are therefore the most difficult turn to make at a traffic light.

When riding your bicycle through an intersection with a traffic light, you plan your path through the intersection in advance, and position yourself so that drivers can tell from your land position, body language and hand signals, what you are planning to do. You want to convey confidence and place the bicycle in

a place where drivers are expecting to see traffic. You and your bicycle are traffic, just as the car is traffic.

RIGHT TURNS

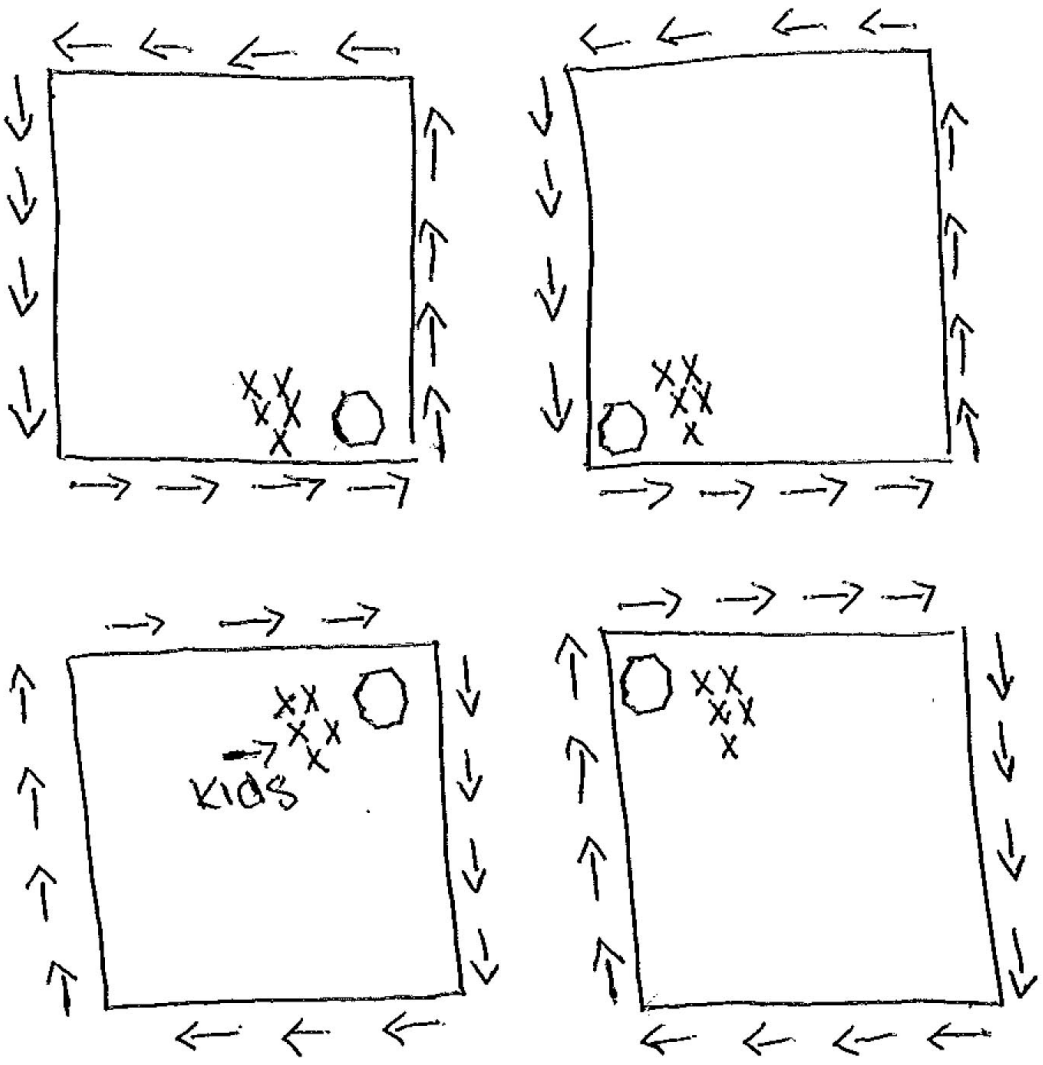
Explain:

Explain that it is important know how to safely navigate four way intersections. Many accidents happen at four way intersections because of a lack of communication between the drivers and bicyclists. It is important that you convey proper communication with vehicles through body language, hand signals and eye contact, so drivers know what your intentions are.

Demonstrate:

Demonstrate lane positioning for a bicyclist approaching the intersection. Set up a mock four way intersection either in a gymnasium or a open space such as a parking lot. Split the children up into four equal groups at each stop sign based on height, so you can appropriately place them with the correct sized bike. Have them ride around their block making a series of right turns. They must stop and let the first approaching bike at the intersection go first, even though they may not be directly crossing paths. This teaches them to yield to

the first approaching bike without having to face each other in the intersections directly.



Once the child has gone around the block he/she will hand the bike off to the next child in line.

GOING STRAIGHT

Ride up to the traffic light on the right hand side of the road. Before you get to the intersection, look back over your left shoulder for traffic, and when the way is clear, move slightly toward the center of the lane. Proceed straight through the intersection on the green light. If there is a right-turn lane but you are going straight, do not ride in the right turn lane. You should be on the right side of the lane that will go straight.

Explain:

Watch out for cars turning across your path that may not see you. It is ok to make noise 0 yell, should or ring a bicycle bell- if you think a driver does not see you. If the night is red when you get to the intersection, you will need to wait in line with the cars. Otherwise, wait in line behind the last car that was there when you arrived at the intersection.

Be careful of cars turning right. If you come to a red light with a car already at the intersection, stop behind the car. Do not pull up on the right side of the car. The car may turn, even if the driver does not have a turn signal on.

LEFT TURNS

The other way to turn left is as a vehicle, on the road. Remember that the opposing traffic that is going straight gets to go first, before any traffic that is turning left. Turning left at a small intersection with a traffic light is similar to any other intersection. Look, signal, look, move left and then get ready to turn left on the green light.

When you have a green light, you must wait until the lane opposite you is clear. If a driver waves you on in this situation, make sure that there is not a driver right behind that first car. The driver who is behind might not see you and could pull around the first car, hitting you.

A green arrow indicates a special rule for who gets to go first. With a green arrow to the left, the traffic turning left has the right to go first. The traffic on the other side of the road that is going straight still has the red light and has to wait.

If you are not sure how an intersection works, you may want to ride over to the intersection and watch how it works as the lights change a few times. Who has the right to go, in what order? Does the light have any special arrows indicating a special right to turn?

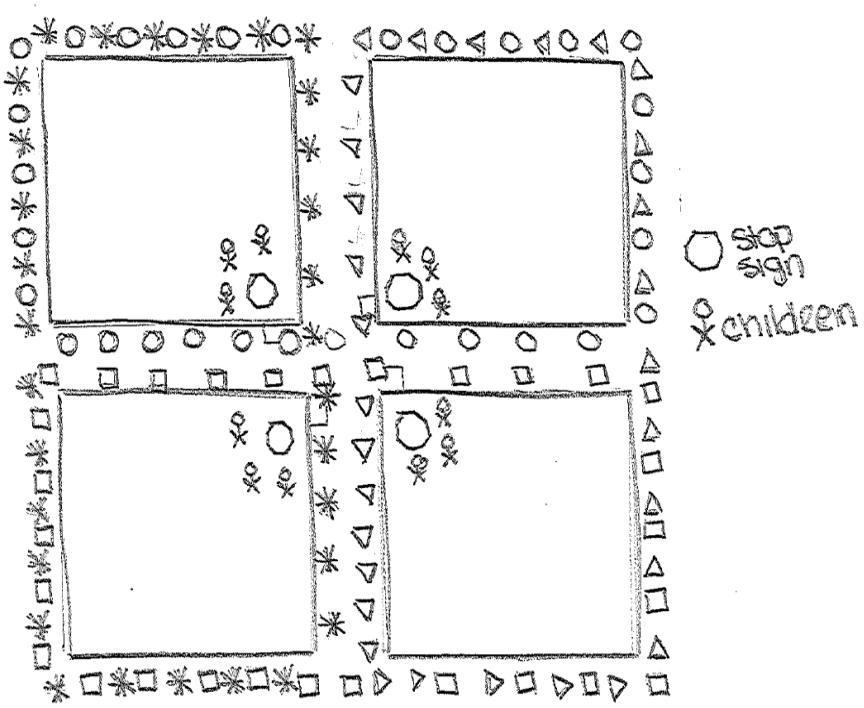
Demonstrate:

Set up a four way stop using cones, tape or chalk and markers as stop signs. Demonstrate the drill by starting in the power pedal position at the back of one of the "blocks" and riding forward to the stop sign. Tell the students that you are going to turn left and make the appropriate hand signal to turning left, raising your left arm straight out to the side. Once you reach the stop sign make a complete stop, scan and turn to the left.

Next organize the kids in groups of four by height so the bikes can be adjusted to the appropriate size. Then have the children line up at the back of each block and have them start at the power pedal position signaling them to go until they have made a complete stop. Once they come to a stop they execute a left hand turn crossing through the intersection. At the opposite end of the block they are required to dismount their bikes and navigate around obstacles. The instructor is in the middle of the intersection checking to make sure that the student has properly executed the following:

- A smooth start with the power pedal position
- The proper hand signal for a right turn
- A smooth stop
- A proper scan
- A proper right turn, returning to the right of the lane

Children will be crossing paths during this exercise. It is important to maintain a vigilant amount of control during this exercise. Once the child has gone around two blocks, he/she will then give the bike to the next student in line and the next student will go.



LESSONS LEARNED

- Make sure the instructions about handing the bike to the next person in line is very clear so the drill will run quickly.
- If a child is still uneasy riding, have them scoot to the stop sign.

LESSON 4: OBSTACLES AND HANDLING SKILLS

OVERVIEW

The fourth lesson focuses on more advanced bicycle handling skills, including emergency maneuvers. This lesson is best done outside, but may be done inside if weather does not cooperate. Most bicycle crashes for bicyclist of all ages, but especially for children, are falls. This lesson concentrates on improving bicycle handling skills, and learning how to avoid road hazards that may cause a crash.

Time: 40 minutes

Key Concepts and Skills

Bicycle Handling Skills	**Equipment**
Balance	Bicycles and Helmets
Quick Stop	Hairnets
Rock Dodge	Tape or Chalk
Obstacles	Hazards
	Placards (to mark stop signs)
Traffic Safety Concepts	
Identification of potential roadway hazards	

BALANCE

Explain:

It is much harder to balance your bicycle when it is going very slowly, or stopped. You may have seen some bicyclist balance on their bicycles at a complete stop, and stay that way for several minutes. Some mountain bikers can do this, and it is something that bicycle messengers will do as they are riding in traffic. This is called a “track stand”, and to learn how to do it, you can start by practicing riding slowly.

Demonstrate:

Show how to ride the bicycle slowly without falling over and tell the children that they will practice this in the next exercise.

SLOW RACE

Ask: Is it harder to go fast or slow, when riding a bicycle? (It is harder to go slowly).

Explain: Our next challenge is to practice balance. It is much harder to balance your bicycle when it is going very slowly, or stopped. This exercise will challenge each of you to see how effectively you can balance.

You may have seen some bicyclists balance on their bicycles at a complete stop, and stay that way for several minutes. Some mountain bikers can do this, and it is something that bicycle messengers (bicycle package delivery services, often in cities) will do when they are riding in traffic. This is called a "track stand". And to learn how to do it, you can start by practicing riding slowly.

This exercise is to practice riding slowly but without falling over. If you have to put your foot down to catch yourself, that will take you out of the race.

Demonstrate:

Show how to ride your bicycle slowly. If you can do a track stand, this is a chance to show off to the class! When you have to put a foot down, stop and proceed.

Activity: Have team members #1 with the bicycle line up at one end of your practice area, and ride as slowly as possible to the other end of the 50' area. The other students can watch the race. The last person across the finish ine "wins". Any bicyclist who has to put a foot down is disqualified and is out of the race.

Rotate the bicycles, and run the race again with the other team members riding.

Ask: How is riding slowly a useful skill to have? (It improves your balance, and you may use it in traffic, such as when you need to wait for a car to pass you.)

QUICK STOP

Explain:

When you brake on your bicycle, the front wheel does most of the stopping. As you will remember from our first lesson on braking, if you brake with just your front brake, you could go over the handlebars. IF you brake very hard, even if

you are using both brakes, your weight will still shift forward, and you could loose your balance, skid out or go over the handlebars. There is a technique called the quick stop that will allow you to stop very quickly without crashing. The most important difference between this stop and an ordinary stop is shifting your weight toward the rear of the bike. You would do a quick stop like this when you are riding fast, and you suddenly need to stop.

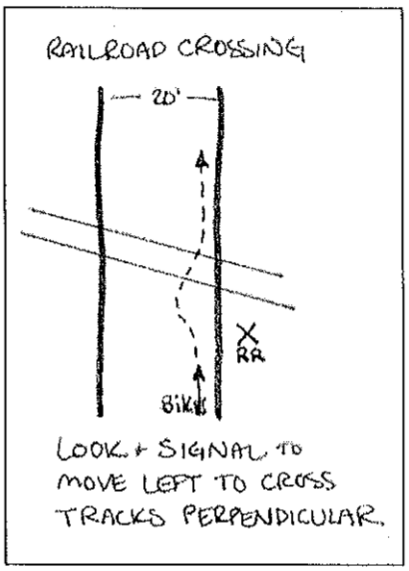
Demonstrate:

Ride your bicycle past the students. Pedal a few strong strokes to get up some speed, and then do a quick stop. Shift your body weight back on your bicycle so that your butt is hanging out behind the bicycle seat. Squeeze harder on the front brake than on the rear. If your back wheel starts to skid, ease up on the front brake.

RAILROAD TRACKS

Railroad tracks and drain grates are both particularly dangerous to bicyclists. Both have long "slots" that can grab your bicycle wheel and force your wheel in a different direction than you are trying to go – this causes you to fall.

Any time you see a long, skinny hazard that could grab your bicycle wheel, the way to ride across this safely is to steer your bicycle wheel perpendicular to the hole.



Demonstrate:

Use the drain grate activity sheet to show how a bicycle wheel could get stuck in the long slots of the grate. Explain how a railroad track could similarly force the bicycle wheel to go along the length of the track. Show how to ride across the drain grate with your wheel perpendicular to these slots.

OBSTACLES

Explain:

As you are riding your bicycle on the right side of the road you should be looking ahead, and thinking about potential hazards ahead of you. If you see an obstacle in your path, you should plan in advance to stop or steer out of the way. If you need to move further out into the roadway to avoid an obstacle, do the life-saver look back to ensure that there is no traffic before you move into the traffic lane.

Ask the students what are some obstacles that you want to avoid hitting? (Rocks, potholes, drain grates, tree branch lying in the road, broken glass, sand or gravel on the road, untrimmed vegetation/shrubs along the road, car pulled off along the side of the road or a slower moving bicyclist). Tell them that they want to ride about three feet away from the side of a parked car to avoid being "doored".

Demonstrate:

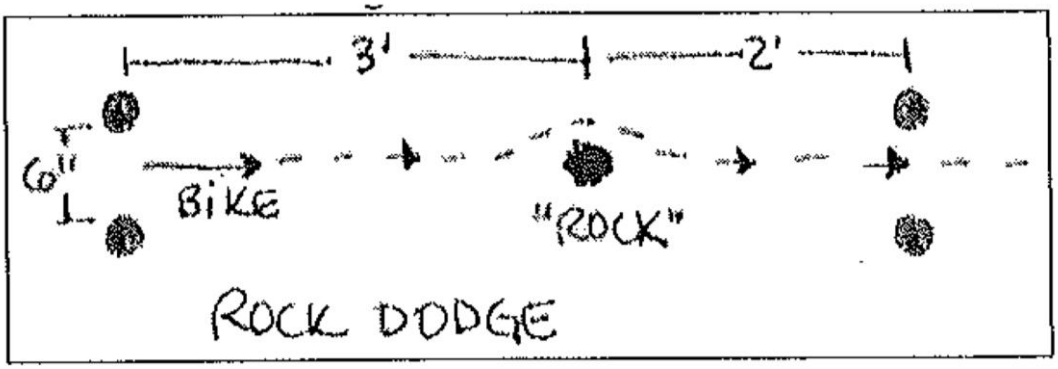
Ride the bike up to a group of obstacles doing a life saver look back before approaching the obstacles and determining they are unsafe to ride though. Stop the bike, dismount and walk the bike through the group of obstacles before getting back on the bike.

ROCK DODGE

Explain:

If you don't 'have time to avoid a rock or other road hazard, you may be able to use the rock dodge to steer around it at the last minute. The front wheel is the wheel that steers on a bicycle. If you hit something with the front wheel, there is a good chance that you will fall. When you do the rock dodge, you first steer around the rock, and then straighten your front wheel while your bicycle frame is still going over the rock. If you hit the rock with your rear wheel, you

probably won't fall because it's the front wheel that is most important for



steering and balance.

Demonstrate:

Turn the handlebar to the left and show how the bike leans to the right. Turn the handlebar to the right, and show how the bike straightens up. Doing this sequence quickly is how to get past a rock.

Activity:

Set up the children into four groups based by height so they will have the appropriately sized bike. Make four squares with chalk or cones indicating four city blocks with stop signs at the center indicating a four way stop. The instructor stands at the center of the intersection and directs "traffic". Place hazards at the center of the back of each block so they can ride steadily for a period of time before having to dismount. Each child will start at the stop sign and continue straight to the end of the second block where they will turn left and work their way through the hazards until they return back to the starting point and pass the bike off to the next student.

LESSON 5: BICYCLE HANDLING SKILLS

OVERVIEW

The last lesson will incorporate all of the skills that the students have learned throughout the course. This lesson is best done outside but can be done inside if weather does not allow.

POST TEST

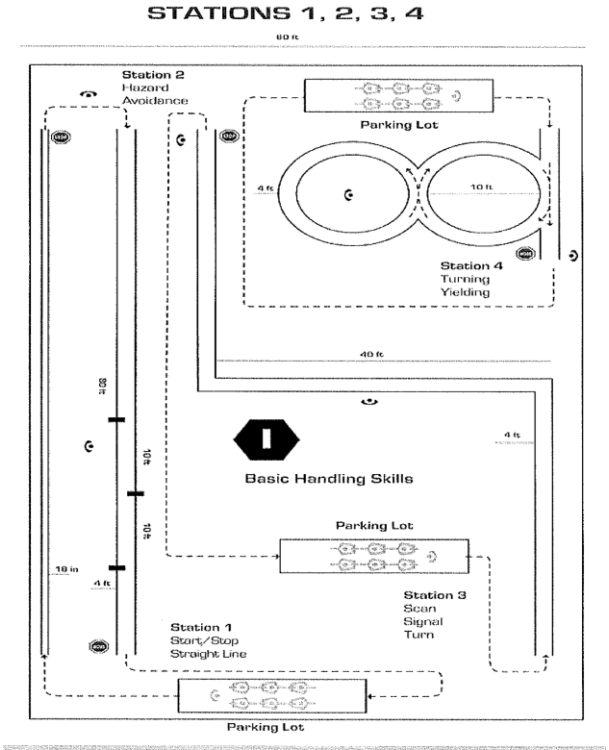
Post Test evaluations will help instructors determine the bike safety education level of each class and help determine the effectiveness of the bike safe training program. It is recommended that each instructor give post test surveys to students. See appendix 11 for a sample survey that can be given to students as an evaluative tool. The Post tests can be compared to the pre test answers to determine a change in knowledge.

Time : 40 Minutes

Key Concepts and Skills

Bicycle Handling Skills	**Equipment**
Successful Obstacle Course Completion Post test	Bikes and Helmets Stop Signs Hazards Tape or Chalk Cones

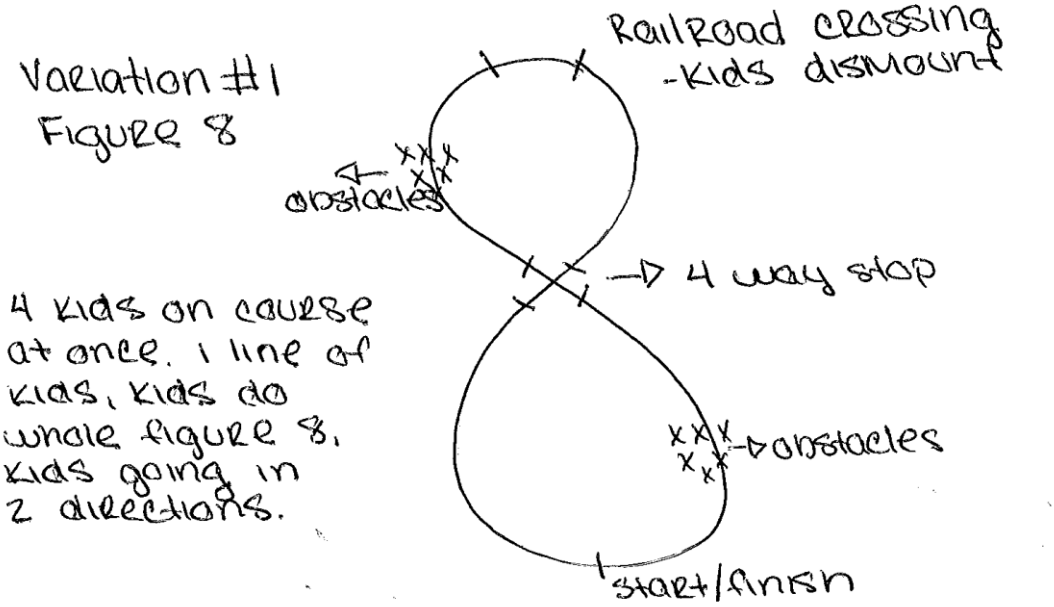
The fifth lesson will be your opportunity to assess the class and decide if they need some remediation on certain lessons or if you can set up an obstacle course that will incorporate all of the information that they have learned in previous lessons. Using the placards at the end of the book and the resources available set up an obstacle course that contains stop

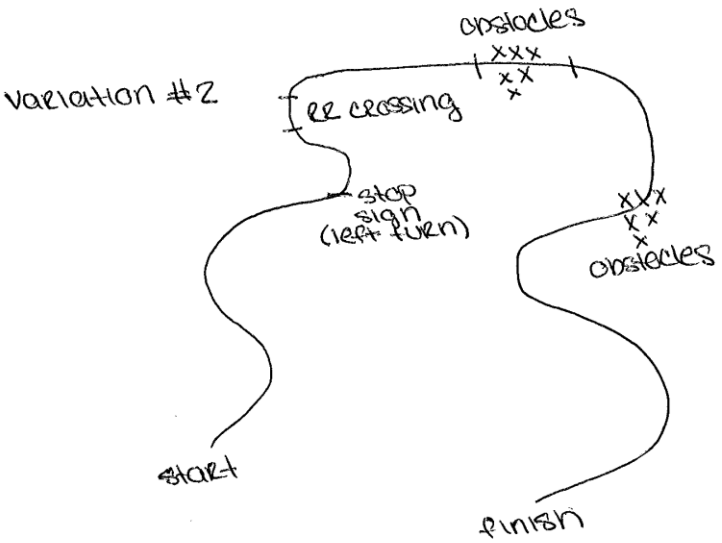


signs, stop lights, railroad crossings, right turns, left turns, hazards and straight aways.

Depending on the resources available to you, each obstacle course will vary. Try to recruit other assistants, as this lesson will require a lot of extra space where supervision of many children can be a challenge.

Examples of different obstacles courses that can be used based on the environment are attached.




variation #2
obstacles
RR crossing
stop sign (left turn)
obstacles
start
finish

LESSON 6: FIELD TRIP/RAIN DAY (OPTIONAL)

TIME: 25 minutes (or longer, as time permits)

OVERVIEW

You will need to recruit some other adult bicyclist to join the class for the field trip, to make an approximate ration of one adult for every 5-7 kids. For a typical class, you will need to recruit 2-4 parents or other school staff. You may wish to ask the principal, health educator, or other educators who are bicyclists. You could also ask your local park/recreation department staff. A local bicycle club may also have members who can help.

MAKE AN EMERGENCY PLAN

- Take a cell phone or walkie-talkie that will enable you to contact the school office and/or emergency services
- Find out in advance if any of your assistant ride leaders can bring a cell phone or walkie-talkie and get their cell phone numbers
- Find out in advance if any of your assistant ride leaders are skilled in bicycle maintenance, know how to fix a flat, or are certified in first aid.
- Make an information sheet for everyone leading the ride, so that everyone has each other's cell phone numbers and knows each other's skills (bike repair, fist aid). Leave a copy of this at the school office.
- Think about how you would deal with the instance in which a student gets a flat tire or has another equipment failure en route. You may be able to assign an adult to assist infixing the bicycle or walking back to school. If you are too far away, and no one can easily fix the bicycle, you may need to arrange a ride.
- What happens if a student has a fall, and has a cut needing attention? If the cut is minor, can an adult skilled in first aid deal with the situation and return to school with the student?
- How could you deal with a more serious fall or crash in which emergency services are needed?

Keep in mind that, although it is good to be prepared, there is only a slim chance that you would need to use your emergency plan.

LESSON SCRIPT

Check Equipment:
Have the students get their bicycles and line up in their bicycle teams.

When the students are ready, have them do the Eyes, Ears, Mouth, test for their helmets, and the ABC Bike Quick Check for their bicycles. Have them check clothing for light, bright and tight.

INTRODUCE THE RIDE

Explain:

In the bicycle field trip, we will follow all of the rules of the road, and put into practice all of the lessons that we have learned in this unit. When you have ridden with adults before, you may have followed the adults through intersections, with the adults making the decisions.

Today you are the ones driving. Each student will make his or her own decision- just as each motorist drives his or her own car. When we get to intersections, each bicyclist will take his or her turn, and decide when it is safe to go.

When we arrive at more complicated sections of the ride, we may stop, pull over, and discuss the best approach before we ride. When we stop, get completely off the rod. Adult ride leaders should also get completely off the road.

As we ride together, leave at least two bicycle-lengths between you and the bicyclist in front of you. When we are going downhill, you may need to use your brakes gently to keep from getting too close to the rider in front of you. Remember that there may be road hazards that you cannot see if there is someone in front of you. As a courtesy, point out road hazards to the bicyclist behind you, as long as you can do so without swearing.

We will ride single file; no passing.

RAIN DAY

Overview: It is useful to use rain days as opportunities to introduce logistical skills and safety curriculum into training. The following are ideas of things that can be introduced into a classroom setting in the case of rain.

BOOT SCOOTIN' BOOGIE

The following video is an informative and useful video to introduce to the classroom that will keep children engaged with the common principles of Bike Sense.

http://www.youtube.com/watch?v=dStGTWZlZHY

MAP GAME

Gather maps of your city for each child in your classroom. Ideally, these maps will have common bike routes or "safe routes" laid out for bicyclists. Ask the children to find their house. Then ask them to find their school. Once they have found these two areas, ask them to find the safest routes from home to school. If the children catch on quickly to this lesson, you can find common markers in the area, such as the grocery store or library and have them navigate how they would get to and from these places to their house on a bike.

HELMET SAFETY

Find a Styrofoam manikin head, 4 eggs in individual ziplock bags and a helmet. Cut the bust in half and hollow out the inside to place the egg in. The eggs need to be wrapped in bags to avoid making a mess. Place the egg in the bust and drop the bust on the floor to demonstrate what happens to the human brain when a bicyclist gets into an accident. Then, place a helmet on the head of the bust and drop the bust on the floor to indicate how safe the brain is when wearing the helmet.

ENFORCEMENT

The Bike Sense Program is unique in that it pairs bike education with enforcement. This allows children of the community to be taught not only how to ride a bike safely and properly, but allows for their bike safety skills to be reinforced in a positive way. The Bike Sense enforcement piece was modeled after the Minneapolis "Bike Cops for Kids" program that provides bike safety outreach to children in the Minneapolis area by School Liaison officers during the summer months.

The enforcement piece of the Bike Sense Program is only one key element of a bigger goal of within the bike sense program, youth outreach. The Bike Sense Program provides a link between officers and youth for enforcement, encouragement and engagement within local neighborhoods where a police presence often stigmatized by youth in a negative way. The ultimate goal of enforcing the Bike Sense program is to use bike safety as a catalyst to create positive interactions between law enforcement officers and youth.

ENFORCEMENT

Enforcement of the Bike Sense Program cannot be done without creating a relationship within the local police department. Local bike programs are encouraged to reach out to their local public affairs officer to create a partnership between bike safety education and bike safety enforcement within the community.

There are different avenues of approach for hiring and compensating bicycle safety enforcement officers within each community. School liaison officers often times are willing to participate in summer programs as a way to stay engaged with youth in the summer months rather than going back on patrol. Grant funding can also be acquired and distributed as overtime pay to bike safety officers.

It is important that bike safety officers meet the physical and interpersonal requirements necessary to be an effective youth bicycle enforcement engagement officer. It is highly recommended that officers become certified as qualified bicycle officers through IPMBA, the International Police Mountain Bike Association.

Officers must be in good physical shape and have good youth communication skills. These officers will be on patrol for extended periods during the summer months so it is important

that they are able to sustain prolonged periods of physical activity and maintain the enthusiasm necessary for the Bike Sense program to be effective.

IMPLEMENTATION

Youth bicycle safety officers are sent out on patrol in pairs for two-hour increments, two times per week. These patrols can be extended based on funding for each program. These areas are selected in conjunction with the Bike Sense Education program such as Community Centers. Bike Sense training is often implemented in areas of lower socioeconomic status where the local community often stigmatizes police presence. Bike Safety Officers are able to interact with youth in these areas in a manner that builds trust and confidence in local law enforcement agents that will have lasting impact on the community.

There are many different factors that contribute to running a successful Bike Sense enforcement program. Officers are responsible for many different requirements that are necessary for marketing the program, operating the program, community outreach and evaluation of the program.

MARKETING

With so many of our youth connected to social media outlets, social media and the Internet are great ways to reach out to the community. Facebook, Blogs and Websites are great ways to promote the Bike Sense program in local areas. As the officers engage with youth, encourage them to take pictures of their interactions and post them on social media pages. It is recommended that each department consult their legal department first however; about the procedures of posting children's pictures on social media pages. It may be useful to have a parental waiver for parents to sign before posting pictures of children on social networking sites as well. Social media marketing be done in the mornings before officers go out on patrols, or officers can post where they will be that day and encourage youth to come engage with the officers while on their patrol. If funding allows, officers can incentivize these interactions with the promise of a prize.

Ideally, incentives that are given out to children will promote bicycle safety. Local partnerships with businesses may allow for programs to buy helmets in bulk that can be given out to children while officers are on patrol. Additionally, information about local youth bicycle education classes, which are being implemented in the area, can be given out to children with a certificate for a free class. This interaction between child and officer will not only be a

positive interaction for local youth, but it will help build trust between enforcement officials and youth. If funding does not allow for bike helmets, stickers or other smaller incentives can be used as well.

OPERATION

The ideal times for officers to be out in the community has been shown to be between 8 am-10 pm while the target demographic of youth (between 6-12 years old) are outside. Different patrolling locations are determined by where the youth bicycle education classes are being implemented.

Officers can set up a schedule and determine which areas they would like to patrol a week prior to implementation based on the different schools or community centers that have implemented the program. This will allow for positive interaction with youth and useful evaluation for children who have gone through the Bike Sense Program. Officers can then follow-up to make sure that they are following the necessary safety guidelines that they learned during the Bike Safe training course.

Once the officers are out on patrol, encourage them to engage with youth as much as possible regardless of weather they are on a bike. Officers are encouraged to give children helmets and a certificate for a free bike safety-training course in the community. Bike Cops for Kids has implemented a successful strategy of giving children helmets that do not have them. Then they are telling youth that if they see them wearing their new helmets the next time they are on patrol, even if they aren't on their bike, they will win a free bike. This encourages youth to carry around their helmets with them in anticipation of seeing youth bicycle enforcement officers. This bike is then given to them in a special ceremony in front of family and friends. This ceremony, or the interactions between officers and youth when they receive their helmets can be documented with a camera and then posted on social media outlets as an invaluable marketing tool for youth outreach.

Officers who are on patrol are also encouraged to stop and evaluate bike safety standards with children on bikes. They can mentor them on the ABC Bike Quick Check, Equipment standards and other bicycle safety measures that are taught in the Bike Sense Program. If the child is not wearing a helmet, officers can give the child a helmet and talk to them about the importance of being safe on the road. If the child hasn't already done so the officer can give him or her a certificate for a local Bike Sense program.

Youth bike safety officers have many opportunities to engage with youth and also to learn more about the neighborhoods that they are patrolling. During the summer month's crime is at an all time high. Officers spend much of their time reacting to situations. Youth Bike Safety Officers are encouraged to interact with youth in a positive way that will prevent crime in high-risk areas in both in the long term and short term. Because officers are more available on bikes, they will be able to learn about different situations in local areas that can be dealt with before they become problems. Additionally, the rapport that they officers are building with youth will encourage youth act as proactive crime prevention.

CREATING PARTNERSHIPS

Partnerships with local bike stores and bike clubs can be useful partnerships for the Bike Sense Program. Because of the limited resources and highly skilled requirements needed to run the program smoothly, it is important that the program pick its opportunities wisely. Officers and Instructors of the Bike Sense Program are highly trained in youth engagement and bicycle safety laws. Creating partnerships with local hospitals, businesses or bicycle safety programs can be great way to gain the resources necessary to outfit the program with bikes, helmets and funds for skilled law enforcement officials.

It is important that officers meet youth in their neighborhoods. The premise of the Bike Sense program is to develop safety measures with youth in their communities. Promoting Bike Sense at events like National Night out is a great way to promote the program, however, one on one interaction are always best. Handing a child a helmet and talking about the importance of bike safety can be much more effective with limited resources than handing out helmets to children in a line without any discussion of bike safety measures.

Appendices

INTRODUCTION TO BIKE SENSE ON-BIKE!

Dear Parents and Guardians,

In a few weeks, our school will provide Bike Sense On-Bikes safety education lessons. This program was developed through the Bike Louisville Program to teach children bicycle handling and traffic safety skills.

Bicycles are legal vehicles under Kentucky state law. Bicycle safety is a first step in learning to operate a vehicle safety on the roadway.

We are contacting you at this time, to find out if your child will be able to bring his or her bicycle and bicycle helmet to school to use during the lessons. The school will have bicycles if you do not have one or can not bring it to school. Students will share bicycle during the instruction in a supervised setting. Please return the enclosed equipment survey to indicate your ability to bring a bicycle to school, and your willingness to share with others. Each student who does bring a bicycle helmet will be able to use the schools bicycle helmet with a hairnet for personal safety and hygiene. Up to 90% of child bicycle fatalities could be prevented by wearing a properly fitted helmet.

Before participating in the Bike Smart curriculum, please use the enclosures to help your child prepare:

- Make sure your child's helmet is sized and fitted correctly using Fitting a Bicycle Helmet.
- Check your child's bicycle using the enclosed ABC Quick Check worksheet.
- Plan with your child to wear bicycling – appropriate clothing that is light, bright and tight.

If your child will ride his or her bicycle to school to participate in the Bike Sense On-Bike lessons, we encourage you to accompany your child to school, or ensure that he or she has a good route and adequate safety skills for traffic along this route.

We look forward to your child's participation in a successful bicycle safety program in our school. Thank you for your support.

Sincerely,

Enclosures" Parent Survey; Fitting a Bicycle Helmet; ABC Bike Quick Check

This program is made possible with Sharing the Road License Plate funding from the Paula Nye Grant and is based on the curriculum BikeSmart On-Bike developed by the Center for Health & Learning

BICYCLE EQUIPMENT SURVEY

For School / educator to complete before sending home:
Weather permitting; Bike Sense On-Bike instruction dates will be as below:

_____	_____	_____	_____	_____	_____
Lesson 1	**Lesson 2**	**Lesson 3**	**Lesson 4**	**Lesson 5**	**Lesson 6 (optional Field trip)**

To be filled out by parent or guardian, and returned to school.

Please return to school by _____ (Date)

Student's Name_____ Grade: _____

Student's Classroom Teacher: _____

The Bike Sense On-Bike Lessons will be taught as a series.

BICYCLES

Can your child bring a bicycle to school on the dates above? ___ Yes ___ No

HELMETS

Does your child have a bicycle helmet that fits? ___ Yes ___ No

BICYCLE FIELDTRIP – PARENT PARTICIPATION

Our unity may include a bicycle field trip on local streets. Would you be interested in joining a bicycle field trip for one day only? You would be required to bring your bicycle and helmet and ride with the class
___ Yes ___ No ___ Not sure ___ Depends on date

FITTING A BICYCLE HELMET

If your helmet fails the Eyes, Ears, Mouth test, this is how to adjust the fit.

1. **Unbuckle the chinstrap, take the helmet off, and open up the plastic support system**
   Not all helmets have a plastic support system. If you helmet has one, it will look like a large ring of plastic around the back of your helmet, with an adjustable dial or buckles at the rear.
2. **Place your helmet level on your head, so that it would pass the "Eyes" test.**
   You should be able to see the brim of your helmet when you look up
3. **Check that the helmet is the right size for your head.**
   If the helmet sits up on top of your head, it is too small and you need a new helmet! If the helmet is very loose on your head, your helmet is too big.

4. **If you have a plastic support system at the back of your helmet, tighten it.**
   Make sure your helmet is still level on your forehead. The support system should be snug but not too tight.

5. **Adjust the ears straps to form a Y under your ears.**
   Work with a buddy to do this, as it is hard to do this yourself. There are plastic sliders on these straps. If the slider has a buckle, loosen it to adjust the straps. Adjust the slider on both straps to form a "V" shape under, and slightly in front of, the ears. Keep your helmet level on your head while you do this adjustment. Lock the slider if possible.

6. **Adjust the chin strap so that it is snug under your chin.**
   Buckle your chin strap. Adjust how the strap goes through the buckle until it is snug, so that no more than one or tow figures fit under the strap. You may need to buckle and unbuckle your helmet several times as you adjust the strap and check the fit.

7. **Do the Eyes, Ears, Mouth test again to confirm that your helmet now fits properly!**

Illustrations from the National Traffic Highway Safety Administration

Active sheet from BikeSmart On-Bike by Becka Roolf Center for Health & Learning, 2008
Developed for the Vermont Safe Routes to School Program

Equipment Standards

Equipment need for the Bike Sense On-Bike! Curriculum

Bikes

How many bikes do you need?
10 have worked well with a class of 30.

What size bike works the best?
20 inch bikes work well for 3rd and 4th graders
24 inch bikes work well for 4th and 5th graders

What type of bike works the best?

20 inch bike
- Single speed
- Coast brake
- Rear hand brake

24 inch bike
- 7 speed
- Front and rear hand brakes

Kick stand are a must, but do not always come standard

Helmets and Hair nets

How many helmets do you need?
Every child must have a helmet

What size helmets do you need for a class of 30 students?
Small 7
Medium 20
Large 10
Xlarge 7

Colors are important, why?
So you can color helmet sizes

Helmets R Us $6.45

Hairnets are important:
Ziplock bags with the child's name on them work well for storage.

Equipment

Bicycle Floor Pump

Tire Levers

Allen Wrenches

Spare Bicycle Tubes

Pedal Wrench

ABC BIKE QUICK CHECK

A is for air pressure

Squeeze the tires to check for low air pressure.

_____Does the wheel feel firm?

B is for brakes

Squeeze each brake lever. (Note: Coaster brakes do not need to be checked)

_____Does the wheel stop quickly?

_____Does the brake lever hit the handlebar?

C is for chain

_____Is the chain on track?

_____Is there anything caught in the chain?

_____Is the chain clean and lubed?

QUICK is for Quick Releases.

Check the quick release on the front and rear hub and on the seat post.

_____Are they in the closed position?

SPIN is for spinning the wheels

_____Do they spin smoothly?

_____Do they have any broken spokes?

Other:

Check reflectors and lights

_____Dare they clean, working and visible?

If you cannot check off every item, ask a knowledgeable adult for assistance, or bring your bike to a bike shop.

BIKE SENSE ON-BIKE

Dear Parents and Guardians,

Our school is currently providing Bike Sense On-Bike safety lessons. This program was developed through the Bike Louisville Program to teach children bicycle handling and traffic safety skills.

As part of this module, we plan a short bicycle ride with the students on local roads. In order for your child to participate, we ask that you return the enclosed permission slip to the school.

Bicycles are legal vehicles under Kentucky state law. Bicycle safety is a first step in learning to operate a vehicle safely on the roadway.

The Bike Sense On-Bike curriculum focuses on these critical concepts and skills for bicycle safety. We encourage you to discuss these concepts and skills with your child:

Ask them where they should ride on the roadway with regard to other traffic.

- Practice having them look back over the shoulder for traffic, without swerving.
- Practice stopping at the end of the driveway and at stop signs, looking for traffic, and determining when it is safe to go.
- Practice making left-hand turns on neighborhood streets or busier roadways, as appropriate to age.
- Ask them to explain how stop signs and traffic signals control the flow of traffic.
- Map out some bicycle-friendly routes to destinations such as: school, recreation fields, library, general store, etc. Talk through how to approach the traffic patterns and intersections on the way to each of these destinations, and practice riding them at low-traffic times of the day.

Bicycling is healthy for your child. Biking cuts down on pollution and vehicle traffic, and is also fun! Thank you for your support.

Sincerely,

Enclosure: Bicycle Fieldtrip Permission Slip

This program is made possible with Sharing the Road License Plate funding from the Paula Nye Grant and is based on the curriculum BikeSmart On-Bike developed by the Center for Health & Learning

BICYCLE FIELD TRIP LEADER INFORMATION

This information is for parent or community volunteers who join the Bike Sense On-Bike class for a bicycle ride. You will be riding with students who have recently received instruction in bicycle safety. We will be riding on the right side of the road and obeying all traffic laws. The students should be encouraged to look and make their own decisions about traffic. Your role is to supervise but not to shepherd.

Please plan to be at the school, ready to ride, 5 minutes before the ride starts.

YOUR EQUIPMENT

- Bring your bicycle in good working condition and your helmet.
- Check your quick releases especially if you have removed a wheel to transport your bike.
- Remember to dress in bright or light clothing, modeling clothing that a typical child bicyclist might wear. This is a short ride so you do not need "bike clothes."

COMMUNICATION

- Introduce yourself and learn the names of the students in your sub-group.
- Be clear and specific when giving directions.
- Give responsibility to students by rotating ride leaders.
- If problems occur or a student is being difficult, discuss problems individually. State they will not be allowed to ride again if they do not follow directions.
- Remind students to be safe and predictable riders.

PRE-RIDE

- Everyone will do a helmet and bicycle safety check.
- Remind students to obey all traffic rules and signals and to ride in a single file, passing is not allowed.
- State that each person must think and act for himself or herself; not just follow the leader.
- Remind students to stop for yellow lights.

RIDING TECHNIQUES

- Position yourself at the front or back of the group.
- Give clear and loud verbal warnings and directions, encourage students to be verbal.
- Ride on the right side of the road with “space cushion” for opening car doors or other obstacles.
- Avoid riding on sidewalks and making illegal maneuvers.
- Left turn – look back for traffic, give left turn signal and move to the left side of lane, give signal again at intersection, watch for oncoming traffic and turn back into the right side on the adjacent street.
- Stop signs and red lights – a) group stops in a single file; b) ride leader (you) rides to front of group; c) leader coaches each rider individually through intersection; d) leader instructs first student to wait ahead while the remaining riders cross the intersection. Be specific (e.g. have student leader wait near a parked car, driveway, mailbox, or tree).
- Stop your ride and walk the bikes if you feel uncomfortable with the riding conditions or the group is out of control.
- Stick to the same route as the overall group leader.

Rider leader information adapted from the Bicycle Transportation Alliance of Oregon, as a Bike Sense Activity sheet. Developed by the Center for Health & Learning for the Vermont Safe Routes to School Program

NOTES ON STUDENT BICYCLE MAINTENANCE

If you can arrange for a local bike shop mechanic to come to school at the start of the school day when your students are bringing bicycles for Bike Sense On-Bike, the mechanic may help you to deal with any major problems. Bike mechanics will usually bring a portable repair stand; you could set this up near your school bike rack in the morning.
If you feel comfortable with basic bicycle maintenance, you may wish to also bring the following tools to class (especially the first class).

- Chain lube
- Penetrating oil (Liquid Wrench)
- Set of adjustable wrenches (large and small)
- Allen wrench set (also called hex wrenches)
- Screwdrivers, Phillips and flathead

Air: The most common problem you will find with the students' bicycles is low air pressure in the tires. If the air pressure is just slightly low, allow students to use the bicycle without taking the time to pump up tires. Make the bicycle floor pump available before / after class or before / after school.

Brakes: Failing brakes, on the other hand, are a serious problem. If brakes are not easily adjusted to work properly, or if you do not feel comfortable with making a bicycle repair, you will need to forgo using that bicycle. Refer the student to a bike shop.

Chain / Crank: Some chain lube, and/or liquid wrench (penetrating oil, frees rusted parts) may be all that's needed to get a stuck chain back in operation. When you test the cranks, make sure that the crank-arms are securely fastened to the bicycle. If there is just a little wobble in the crank arms, it is probably still OK to ride. If there is significant play, or if the bottom bracket feels very "gritty", refer the student to a bike shop.

Quick: Check the quick releases on the wheels and seat post.

Spin: If a wheel is only slightly out of true, you may still use the bicycle. A brake might rub slightly, which is not too big a deal. See if the student can have it fixed before the bicycle field trip. If a wheel is very out of true and the brake rubs severely, you will again have to refer the student to the bike shop.

Stem Bolt / Handlebar Steering: If the handlebars are very crooked with regard to the direction of thE front wheel, or if the stem bolt is loose so that the wheel does not turn when the handlebars turn, do not use the bike in class. If you feel comfortable tightening a handlebar bolt, this is an easy repair. If not, refer the student to a bike shop.

SUMMARY OF BICYCLE – RELATED LAWS IN KENTUCKY

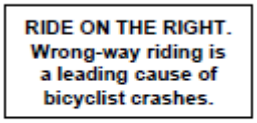
Rules of the Road

The operation of a bicycle in the City of Louisville is governed by several state and local regulations: the Kentucky Revised Statutes (KRS), the Kentucky Administrative Regulations (KAR) of the Transportation Cabinet, and the Ordinances of Louisville-Jefferson County Metro Government. This page will summarize the rights and responsibilities of bicyclists as defined in these regulations, and is not intended as a comprehensive reference guide. Links to the full-text of the regulations are included on this page; please follow them for complete reference information.

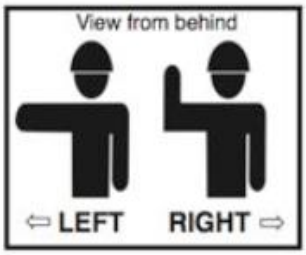
Note: For information about laws pertaining to mopeds, go here and review Chapter 71: Traffic Laws. (Mopeds are covered in section 71.25.)

State Regulations:

The Kentucky Revised Statues (KRS 189.287) give the Transportation Cabinet the right to "promulgate bicycle safety regulations and standards." These regulations are defined in the Kentucky Administrative Regulations (601 KAR 14:020). The less obvious regulations are summarized below:



- You MUST use a front light when riding at night or whenever it is darker than usual (i.e. when it is heavily overcast). [See KRS 189.030(1) for description of when a light is required.]
- You MUST use a red rear reflector or light on yourself or your bicycle whenever riding on a highway or shoulder (definitions).
- At night or when overcast (as described above), you MUST use a steady or flashing red rear light.
- You MUST shout or sound a bell or horn when approaching a pedestrian or other bicycle.
- It is illegal to carry more passengers than the bicycle was designed to accommodate.
- You may not carry a package which prevents you from keeping at least one hand on the handlebars.
- It is illegal to attach yourself or your bicycle to another vehicle.
- Bicycles shall be operated the same as a motor vehicle EXCEPT for the following:
- A bicycle MAY be operated on the shoulder of a highway.
- If a bicycle lane is provided, it MUST be used whenever feasible.
- Not more than TWO bicycles may ride side-by-side in a single highway lane.



SUMMARY OF BICYCLE – RELATED LAWS IN LOUISVILLE

Local Regulations:
KRS 189.287 states that riders and bicycles complying with the 601 KAR 14:020 regulations are exempt from the provisions of KRS 189.040(9), KRS 189.050(1), KRS 189.050(5), and KRS 189.080 (regarding lights and horns). Such bicycles and riders are also exempt from municipal and other local government regulations concerning safety equipment but not method of operation." A number of local regulations apply to the operation of bicycles, defined in the local Traffic Code chapter on Bicycles and Motorcycles, TITLE VII, CHAPTER 74. This ordinance specifies more detailed usage restrictions than do state regulations. They are summarized here:

- No person over 11 years old shall operate a bicycle on any sidewalk in Louisville Metro, and nobody of any age shall ride on the sidewalk downtown.
    - This does NOT apply to officers of Louisville Metro Police Department, employees of Louisville Metro Emergency Medical Services, Louisville Fire and Rescue, the suburban fire protection districts, Louisville and Jefferson County Emergency Management Agency, nor to Downtown Management District Clean and Safety Team personnel, nor to private security personnel employed by hospitals located within the Downtown Form District, as long as they are acting within the scope of their official duties.
- Children are allowed to ride as passengers as long as certain conditions are met.
- No person shall operate a motorized vehicle on a designated bike path or bike lane.
    - Metro Government maintenance vehicles are exempted from this regulation.
- You MUST wear a helmet if you are under 18 years old and you are riding in any Metro Park.

In all other ways, bicycles are considered "vehicles" by the Kentucky and Local regulations and are subject to all rights and regulations of other vehicles. These include:

- You must stop at all stop signs and red lights as must other vehicles.
- You must pass on the left and make turns from the appropriate lane.
    - However you are encouraged to remain in an on-road bicycle lane even if it means you will pass some stopped traffic on the right.
- You must signal, using your hands (see the Bicycle Safety page for hand signals), lamps, or mechanical devices. The signal must be given intermittently for the last fifty feet before the turn.
- All slow moving vehicles must bear as far right in their lane as is safe and practical, including bicycles.
    - If there is on-road parking, a particularly narrow street, debris, or other hazards, you are allowed to claim as much of the lane as necessary to ride safely.
- As stated in Section 70.03 (C) of the Traffic Code: "Every person riding a bicycle or an animal on any roadway, and every person driving any animal on any roadway, and every person driving any animal-drawn vehicle shall be subject to the provisions of this traffic code applicable to the driver of any vehicle, except those provisions of this traffic code which by their very nature can have no application."

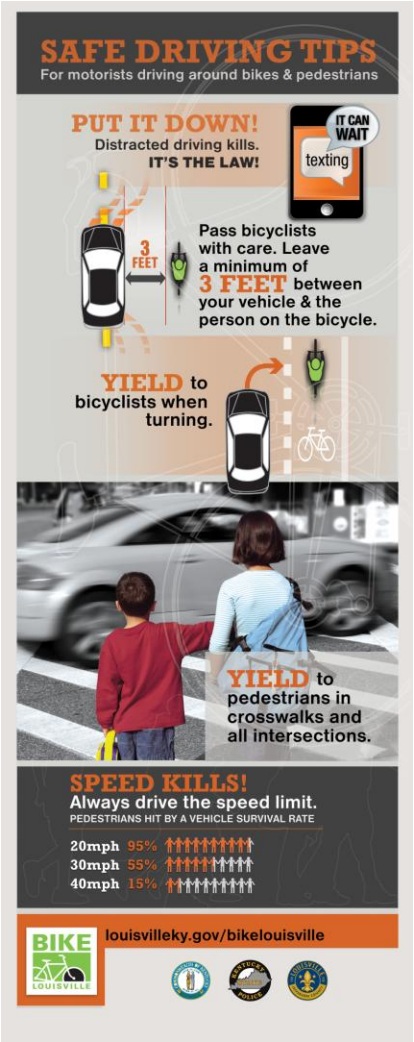
SUMMARY OF BICYCLE – RELATED LAWS IN KENTUCKY

Rules for Motorists Concerning Bicycles

Since motor vehicles and bicycles are both considered "vehicles" under the eyes of the law, there are rules which apply to motorists as well as to bicyclists regarding their behavior on the road.

Motorists MUST:

- Share the road with bicyclists.
- Before passing a cyclist:
- Look to see if there is something in the right lane (debris, parked cars, drainage grates, etc.) that might cause the cyclist to divert their course to the left.
- Pass only when you can allow at least three feet between yourself (as measured from the extent of your rear-view mirrors) and the cyclist.
- Return to your lane only when completely clear of the cyclist.
- If you turn right after passing a cyclist, only do so if you leave enough room that his forward path is not obstructed.
- When opening your car door, look for cyclists in your rear-view mirror.
- The information in the "Rules for Motorists Concerning Bicycles" section comes from the Kentucky Drivers Manual.



PARTICIPATION RECORD & CURRICULUM FEEDBACK

Bike Sense On-Bike

Submit this form within two weeks of on-bike instruction.

Date submitting form:_____

Pedestrian and Bicycle Safety Educator:_____

Phone #: _____Email:_____

Relationship to School:_____

School Name & Address:_____

Did you use student bikes from home? Yes___ No___Explain:

Did the school provide bikes? Yes___No___Explain:

What percentage of students had bikes for your lessons? ___ % (estimated)

How did your students respond to the unit?

Curriculum feedback – What worked well? What could be improved? Please explain on the reverse side.

Please do one entry for each group of students (each classroom or after-school group).

Group name (i.e., Mrs. Smith's class, ASP group, etc.): _____

Grade(s) taught: _____ Dates taught: _____

Number of students in this group: _____

Please fill out the questions for the appropriate format:

❑ P.E. Class – series of lessons	❑ After School – series of lessons	❑ Safety Fair / Skills Day
Which lessons did you implement? ❑ #1: Ready to Ride ❑ #2: Stop & Go ❑ #3: Bike Driving at Intersections ❑ #4: Bike Handling Skills ❑ #5: Preparing for Fieldtrip ❑ #6: Bicycle Field Trip How long are your class periods? _____# minutes Did you change the order / content of lessons and if so, how? Please explain on the reverse side.	Which lessons did you implement? ❑ #1: Ready to Ride ❑ #2: Stop & Go ❑ #3: Bike Driving at Intersections ❑ #4: Bike Handling Skills ❑ #5: Preparing for Fieldtrip ❑ #6: Bicycle Field Trip How long was each lesson? _____# minutes Did you change the order / content of lessons and if so, how? Please explain on the reverse side.	How long was your skills day? _____hours _____minutes Which skills stations did you use? ❑ #1: Bike Shop ❑ #1a: Parents' Orientation ❑ #2: Seeing and being seen ❑ #3: Chaos Corners ❑ #4: Driveway ❑ #5: Crossroads / Intersections ❑ #6: Who's there / Look-back ❑ #7: Rock dodge ❑ #8: Dodge 'em Drive / Road Hazards ❑ #9: Slow Race How many minutes did each class participate? _____

ASSESSMENT RUBRIC

These skills may be assessed during the indicated unit, or in Lessons 5 and 6, as you prefer.

Starting out on the Bike (Lesson #2)

• Pedal position • Smooth start • Lack of wobble or swerve • Low gear to start

Outstanding	Good / Satisfactory	Needs Improvement
Student starts with pedal in power-position and moves forward smoothly without wobbling or swerving.	Student starts with pedal in power position, but wobbles or swerves when starting – or – student starts with pedal not in power position, but still manages to start without much wobble.	Student pushes the ground with his or her feet, wobbles considerably, or falls off the bicycle while starting to move forward from a stop. *Grades 6-8:* On a multi-gear bicycle, the bicycle is in such a high gear that the student cannot get the bicycle going.

Stopping (Lesson #2)

• Downshifting • Signaling • Braking • Controlled stop • Pedal position

Outstanding	Good / Satisfactory	Needs Improvement
Student comes smoothly to a stop using both brakes. Student signals or calls out "stopping" if another bicyclist is behind them. When stopped, the student leans the bicycle to the side and puts a foot down.	Student comes smoothly to a stop using both brakes. Student signals or calls out "stopping" if another bicyclist is behind them. When stopped, the student leans the bicycle to the side and puts a foot down.	Student swerves while stopping, skids out, or falls over. Student does not signal even when another bicyclist is directly behind them. Student does not come to a complete stop, or tries to avoid putting a foot down.

Looking over the Shoulder (Lesson #2)

• Straight riding / Minimal swerving • Look over shoulder • Accurate assessment

Outstanding	Good / Satisfactory	Needs Improvement
Student rides in a straight line while looking over the shoulder, with only a few inches of swerve. Student correctly identifies the simulated situation behind the bicycle – either traffic or the number of arms held up.	Student rides in a straight line, but swerves a foot or two when looking over the shoulder. Student correctly identifies the simulated situation behind the bicycle – either traffic or the number of arms held up.	Student loses control or swerves three feet or more when looking over the shoulder. Student misses traffic behind the bicycle, or is incorrect in identifying the number of arms held up.

Driveway Exit (Lesson #3)

• Stopping • Looking for traffic • Signaling • Pedal position

Outstanding	Good	Needs Improvement
Student comes to a stop at the end of the driveway and looks both ways before proceeding. Student uses power-pedal position, gives the correct hand signal, and rides forward only when the way is clear.	Student slows down at the end of the driveway and looks both ways before proceeding. Student gives the correct hand signal and rides forward only when the way is clear.	Student rides out of the driveway without looking, or at a high rate of speed with a cursory look. Student rides forward when traffic is present. Student does not signal.

Traffic at Intersections (Lesson #3)

• Stopping • Communicating with drivers • Signaling • Taking turn for right of way

NOTE: This assessment may be used at any complexity of intersection. Please indicate type of intersection on your assessment record. Use more difficult intersections for upper elementary / middle school.

Outstanding	Good / Satisfactory	Needs Improvement
Student obeys traffic signs/signals at the intersection. Student communicates with other drivers with hand signals and eye contact. Student rides in the correct lane position for the intended turn. Student knows when it is his or her turn and confidently uses the right of way to move forward to his or her destination.	Student stops at a stop sign and waits for all traffic to leave the intersection before proceeding. Student gets off the bicycle and navigates the intersection in the crosswalks following pedestrian rules. Student hesitates and does not seem to know when it is his or her turn to go.	Student fails to obey traffic signs/ signals – running a red light or stop sign. Student does not use hand signals when turning. Student goes when it is not his or her turn, and without communication from drivers. Student loses control or narrowly avoids a crash.

Turning Left (Lesson #3)

• Looking back • Signaling • Lane positioning • Obeying traffic sign/signal
• Completing the turn

Outstanding	Good / Satisfactory	Needs Improvement
Student looks back over shoulder, signals if the way is clear, looks back again, and moves left in the lane. Student approaches the intersection from the left-hand side of the lane. Student obeys traffic sign or signal and then turns left, to end up in the right side of the lane at the end of the turn, without steering corrections.	Student looks back over shoulder only once. If the way is clear, signals and moves left in the lane as a single step. Student turns left from the left side of the lane; obeys traffic sign/signal, and turns – but needs steering correction at the end of the turn. –Or – Student approaches the left turn as a pedestrian, by riding straight through the intersection, stopping the bike at the far crosswalk, and	Student does not look back before moving left in the lane. Student turns left from the right side of the street. Student cuts the corner and ends up in the wrong lane at the end of the turn.

	walking across the street.	
Avoiding Road Hazards (Lesson #4)		
• Advance planning • Looking ahead • Not striking the hazard • Not losing control		
Outstanding	Good / Satisfactory	Needs Improvement
Student avoids the hazard altogether through lane positioning – looks back over the shoulder for traffic, signals, and moves to avoid the hazard. If traffic is present, the student's preparation for the hazard is far enough in advance that the student can merge into the traffic lane without considerable reduction of bicycle speed. Student's travel line is smooth and predictable: the student plans in advance to avoid the hazard.	Student rides fairly close to the hazard and then avoids the hazard by looking back and changing lane position less than 15' from the hazard, or by using an emergency maneuver (rock dodge, quick stop) to avoid striking the hazard. If traffic is present, the student slows or stops to avoid hitting the hazard or going into traffic. Student's travel line is toward the hazard with a fairly sharp corrective turn.	Student strikes the road hazard. Student loses control of the bicycle or swerves into the traffic lane. Student nearly stops in order to avoid the hazard.
Quick Stop (Lesson #4)		
• Stopping quickly • Shift body weight • Recovering from skid • Not losing control		
Outstanding	Good / Satisfactory	Needs Improvement
Student stops quickly without skidding. Student uses both brakes. Student shifts his or her body weight on the bicycle, so that the butt is extended back over the seat of the bicycle.	Student stops quickly with some skidding. Student uses both brakes, and shifts the body weight back on the bicycle slightly.	Student does not stop, or loses control of the bicycle. Student stops normaly, without shifting the weight back toward the rear of the bicycle.
Rock Dodge (Lesson #4)		
• Avoiding the rock • Riding straight • Not losing control		
Outstanding	Good / Satisfactory	Needs Improvement
Student rides straight through the entry and exit lanes. Student turns the front wheel of the bike around the rock, and then snaps the wheel back the other direction. Student misses the rock with both front and rear wheels.	Student rides straight through the entry lane, but may slightly miss the exit lane. Student turns the front wheel of the bike around the rock, and then snaps the wheel back the other direction. Student misses the rock with the front wheel, but strikes it with the back wheel.	Student is unable to ride through the entry and exit lanes. Student strikes the rock with both wheels. Student misses the rock, but through conventional steering rather than through the rock dodge type of turn.

Bike Sense Questions

Please **circle** the best answer to the question

Date: _____

____Pre test or ___Post Test

School Name: _____

Grade_____

1. When should you wear a bicycle helmet?
    a. When riding in traffic
    b. Whenever you are riding

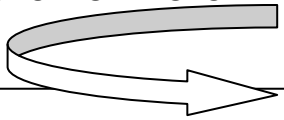
2. What are the things you check for proper helmet fit?
    a. Light and tight
    b. Eyes ears and mouth

3. When is it time to get a new helmet?
    a. When it is more than five years old or has been in an accident
    b. Every year

4. How should you dress safely when riding a bike?
    a. Comfortable clothes
    b. Light and tight
    c. Doesn't Matter

5. When you are riding a bicycle should you ride facing the cars or with the cars coming from behind you?
    a. Cars coming from behind you
    b. Facing the cars

Please turn over for more questions



6. When should you signal?
    a. When making a turn
    b. When going straight

7. Does “yield” mean stop or slow down and look for traffic?
    a. Slow down and look for traffic
    b. Stop

8. When you are riding with a friend who is also riding, is it best to ride next to the friend or single file?
    a. Next to the friend
    b. Single file

9. When you do the ABC-Quick Check, which should you check?
    a. Air in the tires
    b. Chain
    c. Both a and b

10. Does a bicyclist have a right to ride in the road when there is a sidewalk?
    a. Yes, you have the right to ride in the road
    b. No, you must ride on the sidewalk.

11. Bonus. What is a good reason to ride your bike?
    a. It is good exercise and fun
    b. It cuts down on pollution
    c. both a and b

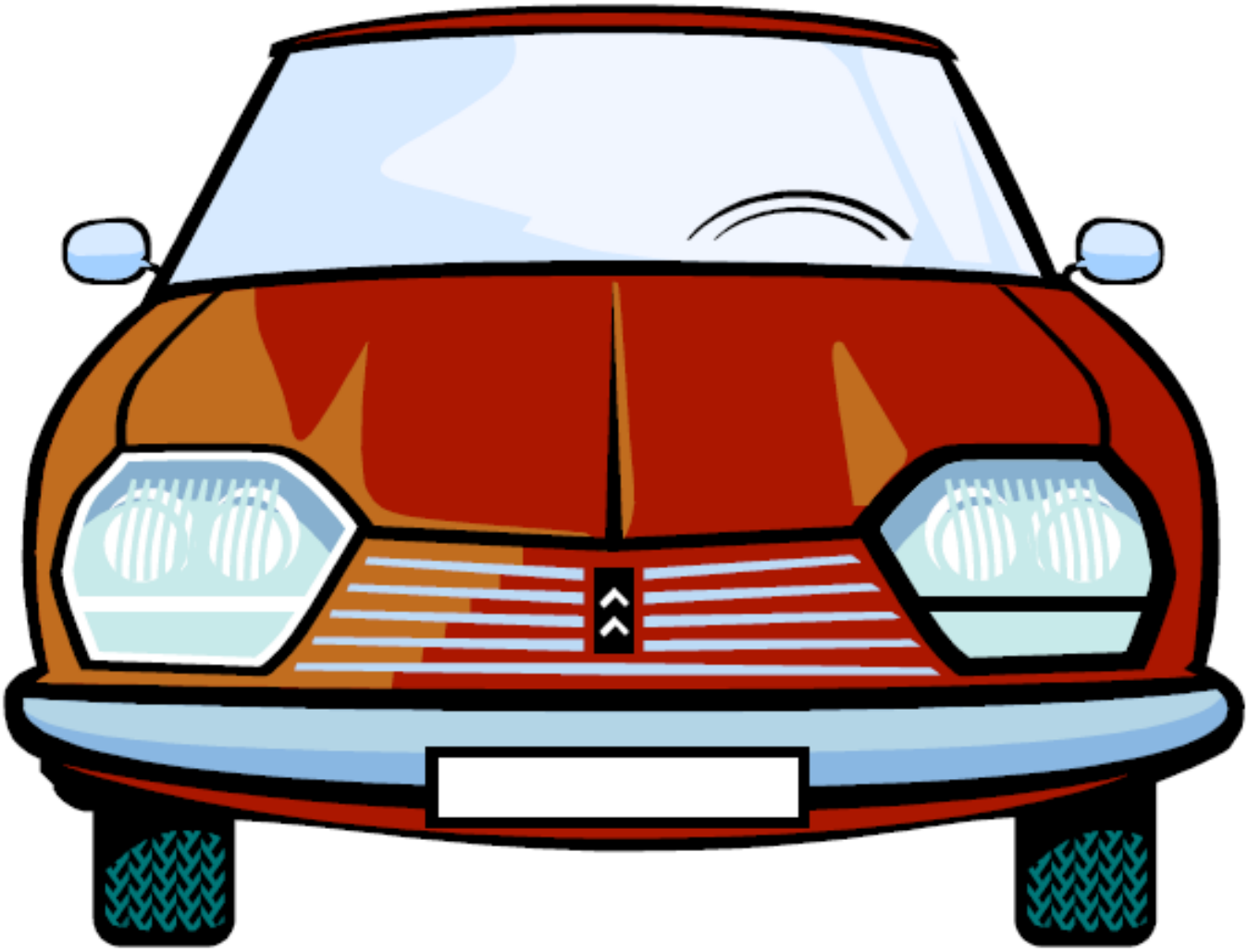
Tell us one thing you like about biking?

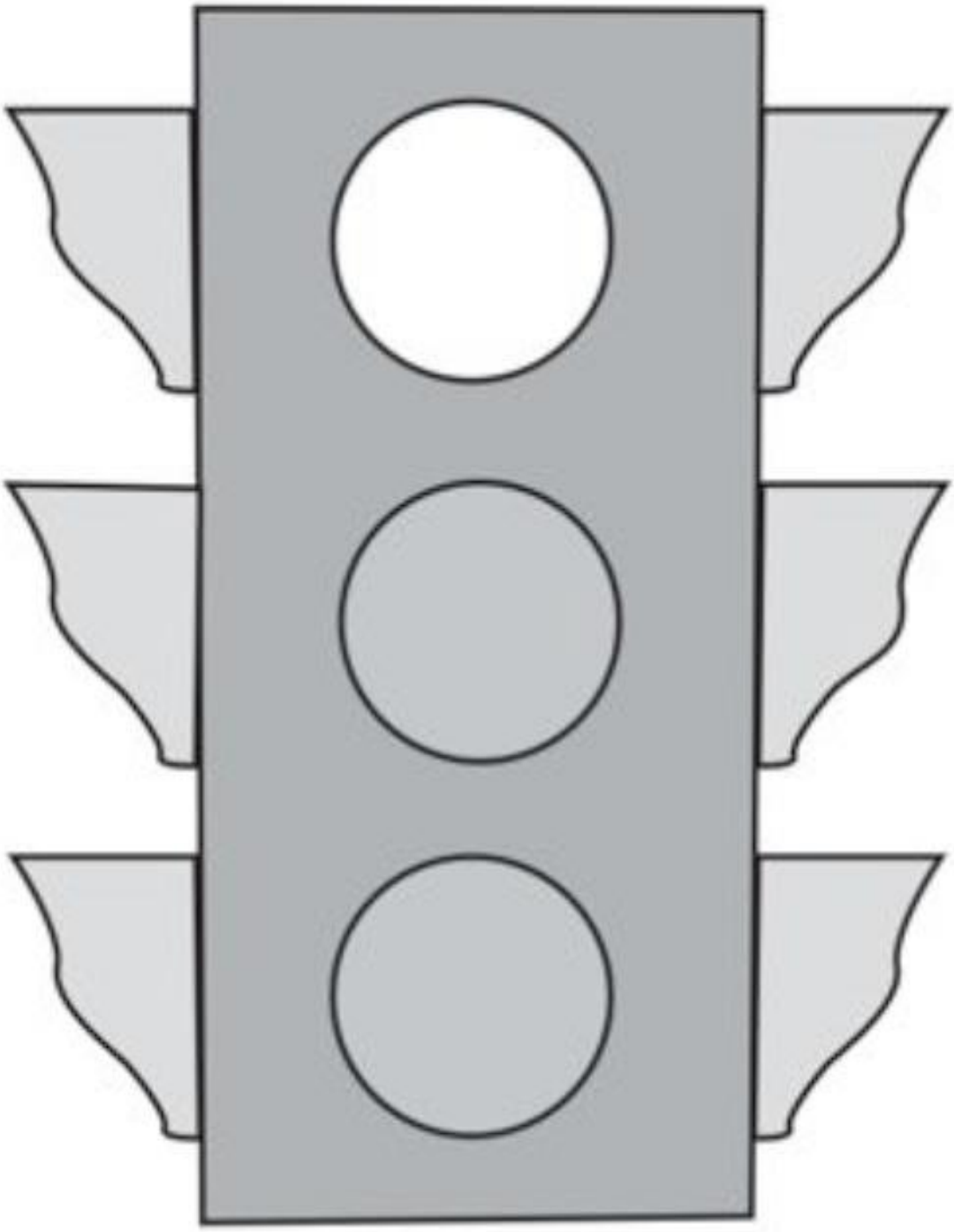
_____

_____

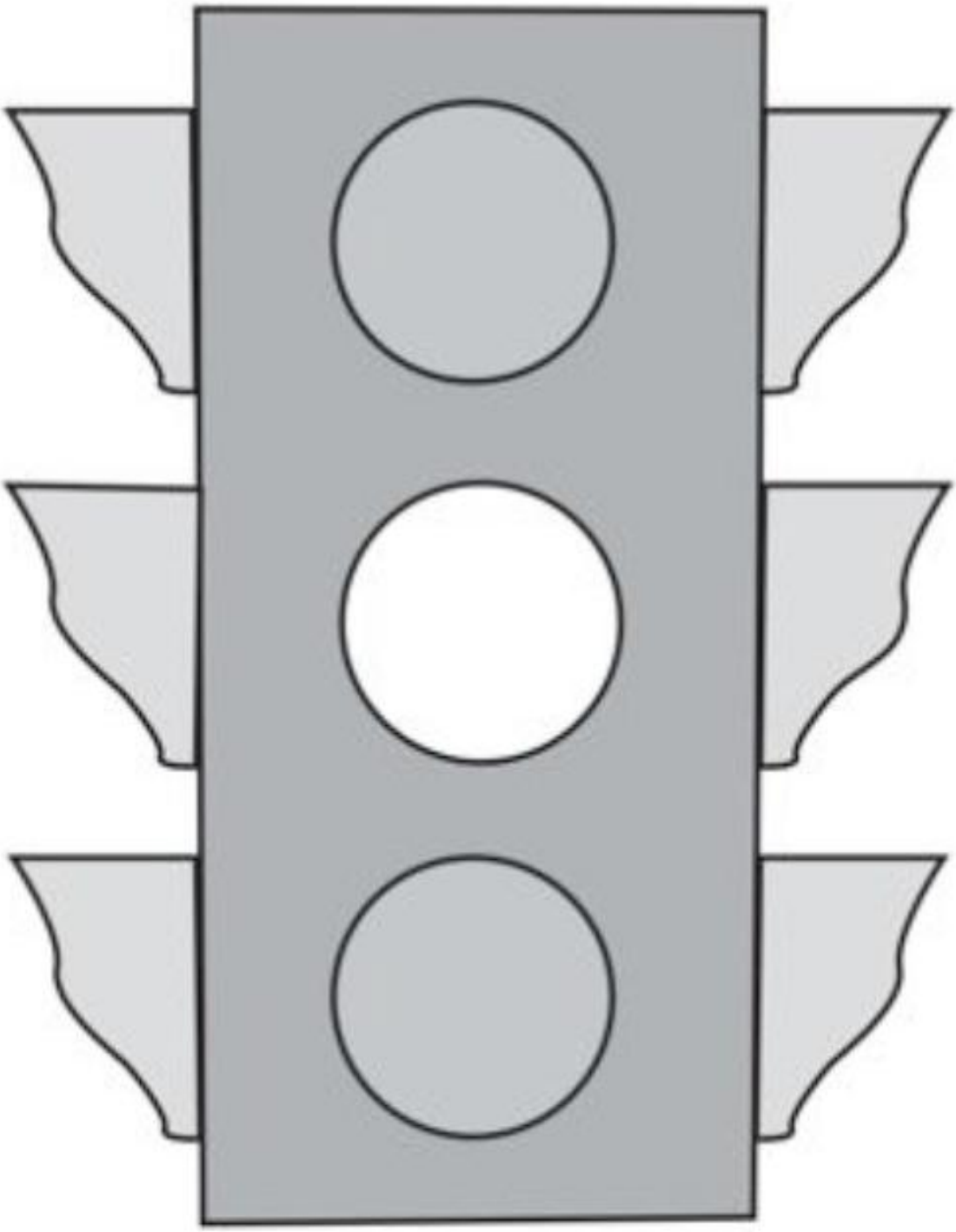
Thank you!


STOP

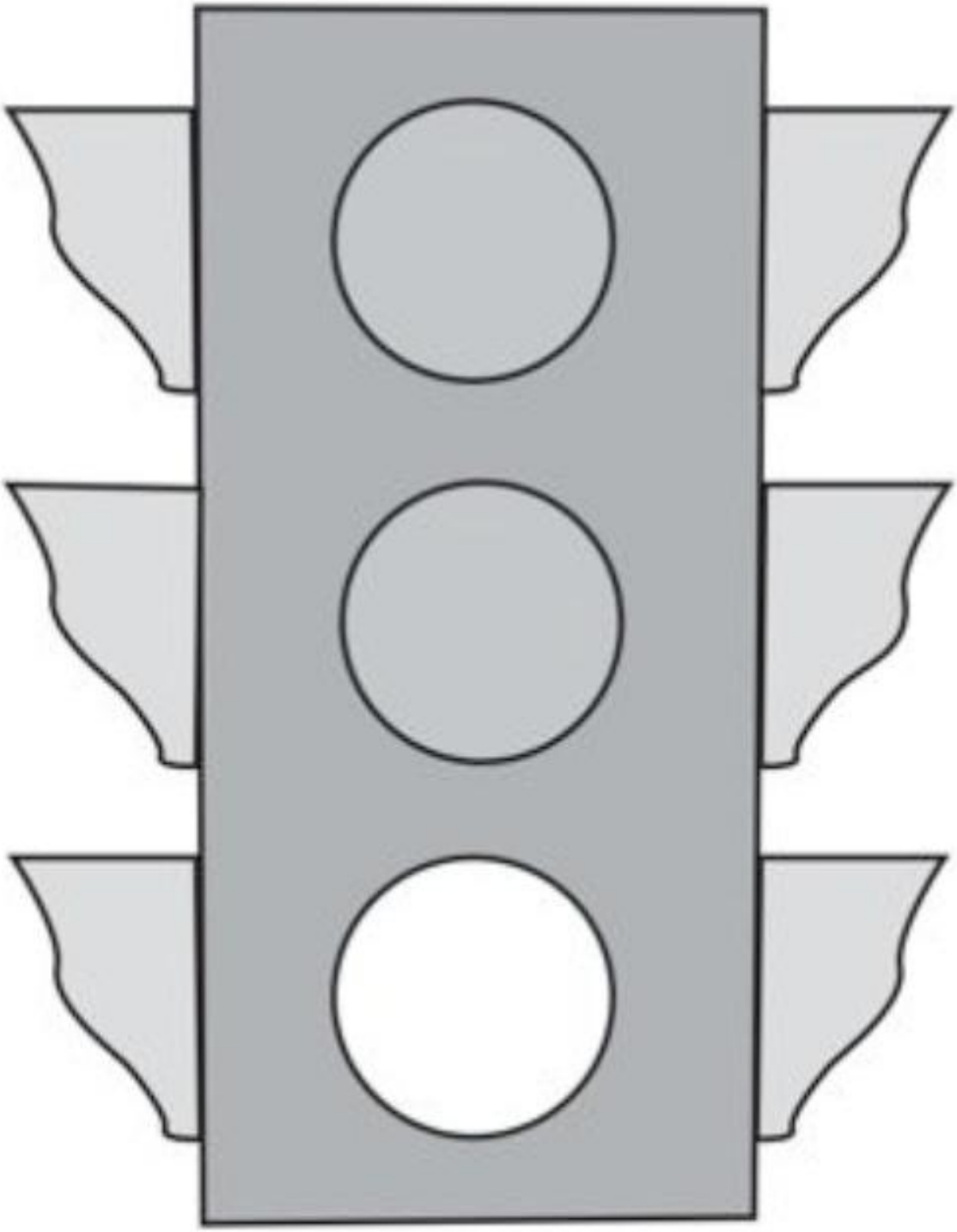




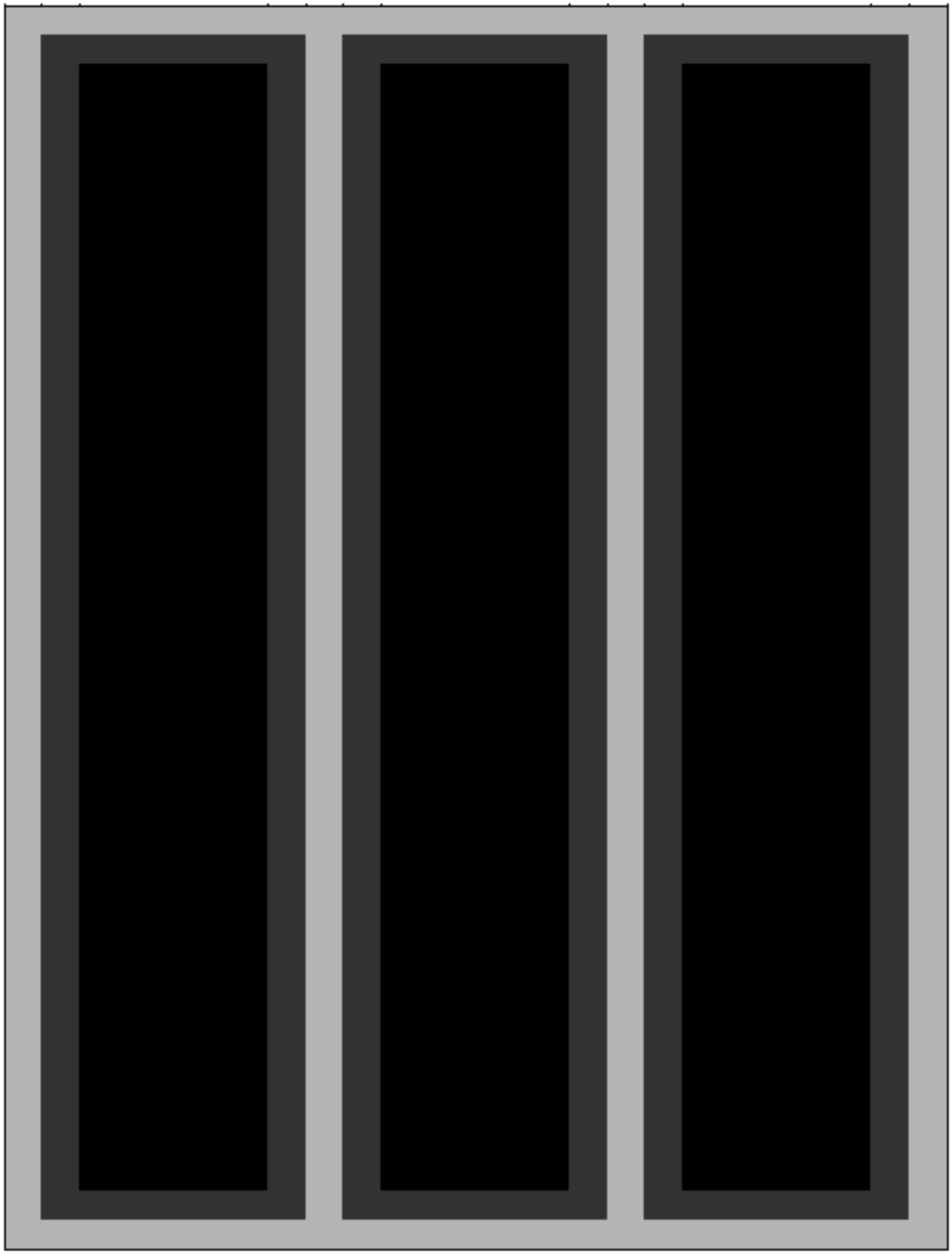
Color the top light red.



Color the middle light yellow.



Color the bottom light green.



Slots width is to-scale with a real drain grate.

Bike Sense
Bicycle Education Check-Up

Date: _____ Age: _____
Name: _____
Neighborhood *(Officers please circle)*:
California Community Center
Cyril Allgeier Community Center
Portland Community Center

Reason for stop (Officers please circle):
Y N Stopping at stop sign
Y N Safe bicycling through intersections
Y N Wearing a bicycle helmet (properly)
Y N Smooth starting and stopping
Y N Demonstrates safe bicycle behavior
Y N Darting into traffic
Y N Use of proper hand signals

Y N Needs further bicycle education

If further bicycle education is needed, please redeem this warning at the specified location below. Dates and times are listed. This warning will allow you attend a one weeklong bicycle education program for **FREE**.

Class Locations and Dates (Officers please circle):

June 27th- July 1st California Community Center
Monday– Friday 1600 W St Catherine St

July 5th- July 8th Cyril Allgeier Community Center
Tuesday – Friday 4101 Cadillac Court

July 18th- July 22nd Portland Community Center Monday– Friday 640 N 27th St

Class Times (Officers please circle):

Ages 6-8	9:10 – 9:50 am
Ages 9-10	10:00 – 10:40 am
Ages 11-12	10:50 – 11:30

Bike Sense is Bike Louisville's Summer Youth Cycling Safety Program

Bike Louisville has partnered with Bicycling for Louisville and the Red Zone Youth Cycling Safety Program to provide summer cycling safety lessons.

Summer cycling safety lessons are scheduled to teach bike handling skills and train with experienced cycling coaches.

Bike Sense serves to encourage youth of all cycling levels and abilities to...

1. Ride bikes for transportation, especially to and from school
2. Learn safe riding skills and use proper equipment
3. Ride for fitness and experience new cycling skills, including racing
4. Learn to maintain their bike and make minor repairs
5. Ride for fun with friends and family
6. Learn basic safety and first aid techniques

Bicycle helmets and bicycles will be provided during all classes. Please wear shoes and athletic clothing. Please no sandals or baggy clothes allowed.

For more information please check us out on line at:
http://www.louisvilleky.gov/bikelouisville/

Or contact Bike Louisville at:
http://www.louisvilleky.gov/BikeLouisville/contactus.htm

BIKE LOUISVILLE

Bike Lousiville

Certificate of Completion

This Certificate is Presented to

_____

In Recognition of Your Participation in the

Bike Sense On- Bike

Date of Completion:_____

By: _____

Rolf Eisinger, M.P.H,
League of American Bicyclist League Certified Instructor
Mayor: Greg Fischer

mayor's HealthyHometown

Bike Sense- Bike Patrol Record												
Date/Time:												
Officer Name:												
Community Center Location:					Reason for Stop							
Name	Location stopped (street address or cross street)	Age	Gender	Race	Helmet	Stopping at stop sign	Safe bicycling through intersection	Smooth staring and stopping	Dressed in bright clothes	Daring into traffic	Use proper hand signals	Picture and signature